
re using water

Posted by john gannon - 2008/06/22 17:32

Is it possible to reuse the water we take out with our water changes and pump it through an RO unit, add some discus pries and re use it .has anyone ever tried this .

thanks
john

Re:re using water

Posted by goldy - 2008/06/22 19:16

I have no idea if this could be done but it sounds like it should be able to be put through an RO unit and come out pure. I wonder does it put extra pressure on the RO unit though as it would be dirty water as opposed to just tap water. I am interested to see what others have done. I reuse my water on the plants and they are happy.

Re:re using water

Posted by sheag35 - 2008/06/26 08:23

Never tried it but i'd presume it would be possible as with an RO you'd be stripping it back to its basic compounds, it probably will as goldy has stated work your RO thoroughly but once remineralised your water i'd presume would be fine to use.. you'd need to research it further though as i'm just guessing that.. be interesting to see if it could be done.. if anyone has let us know

Seamus

Re:re using water

Posted by komalley - 2008/06/26 13:26

Hi,

Minor detail.

U need a certain water pressure for a RO unit to work i.e. to force the water across the RO membrane. Unless u can feed the 'waste water' into your mains or have a pump to generate the appropriate pressure reusing tank water is not possible.

kom

Re:re using water

Posted by john gannon - 2008/06/26 22:17

hi all

i was just wondering if u could possibly use an external filter to do this by somehow attaching the outlet pipe to an RO unit which also means yo could filter the water before it gets to the RO unit.

this is probably a stupid idea but my dream is to build a self sufficient fish house with solar panels and a wind turbine, but as i said this is probably a stupid idea, but still i'd be very interested to hear other peoples opinions

thanks john

Re:re using water

Posted by sheag35 - 2008/06/27 03:30

Nice dream john, self sufficiency would be nice... i see where your going with your idea, as kevin said you'd need a pump of sorts to force the water through the ro unit, running it orr an external filter could possibly work but it has one MAJOR flaw.. if it is going straight into the tank again it would be pure h2o, it needs to be remineralised before going back in or i fear a lot of dead fish would arise
Seamus

Re:re using water

Posted by Valerie - 2008/06/28 15:32

That is an interesting concept ... :-)

From what I read, an RO unit 'dumps' some of the water it filters. I probably depends on the water quality, but, what kind of proportions does it 'dump' ? Is there a way of calculating it? If this volume were to be replaced by dechlorinated tap water, would be enough to remineralise the water ?

Regards,
Valerie

Re:re using water

Posted by john gannon - 2008/06/28 16:14

i was thinking of just using the ro unit when doing water changes .i could take the required water out run it trough the ro unit into a storage barrel where it could be mixed again and then put back into the tanks.
im know this idea has lots of flaws but it would be nice if it worked
john

Re:re using water

Posted by JohnH - 2008/06/28 16:51

John,
A couple of issues are raised here, firstly - and probably most significant is that I don't think a pump from an external filter would give you sufficient pressure to efficiently run your R/O unit I have to have a dedicated pump to effectively run mine and that pushes through water at around 75psi (don't know what that is in bars, but it's quite high). Were you to buy a pump then you could try your theory, but bearing in mind that well over 80% of water passing over an R/O membrane goes to waste you would still find yourself using a lot of the water to attend to your terrestrial plants - I fear.
Now it is possible that the rejection rate of 'used' tank water will be less than from straight tap water, but that's another theory which would need testing...
But considering that the lower the pressure the water is passing over the membrane at the higher the rejection percentage becomes.
I'd suggest, if you have the R/O unit then give it a try...you've little to lose, it shouldn't damage the filter pump if you find that it isn't able to build up the required pressure - so long as you don't leave it too long 'trying'. You would, like you said in your original post, need to replace the lost trace elements too.

Some years ago I built a bit of a makeshift filtration plant using an old Eheim filter body with floss in the lower part and Zeolite above, I would syphon all my waste water through this and reuse a percentage of the resultant water mixed with fresh tapwater to replace the waste I had syphoned out of the tanks...the Zeolite could be 'revitalised' with cooking salt and the floss could be washed out and then both could be reused at the next water change.
I never was able to form any concrete conclusions as to how effective this actually was, and eventually it just became too much hassle to continue...but no fish were lost during the experiement period, it might be worth re-enacting this in these days of potential water metering...I might look into that.

John