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Subject: [REDACTED]
Presentation. II

Attn: [REDACTED]

[REDACTED]
Here is a bit more detail for you to consider as to how you are going to increase water supplies to keep us all refreshed and clean for the next 20-40 years.

Sewerage: “All” the Clarence waterways on the flood plain are effectively estuarine, which is why our water comes from up at Nymboida. Hence if you are going to put it back into the river upstream from the Nymboida take-off point, it would require to be pumped (as the crow flies), for 90km from Yamba or 40km from Grafton. Add another 10km to the put-it-in-the-river -point. Good luck there because that piece of river is NP and a prime wild river and platypus area.

(Of course, you could put it straight into the distribution plant at Grafton, and although it may be perfectly ok, it does have a negative stigma associated with it.

This is necessary in places short of water, but that is definitely not the case for the Clarence – its all to do with attitude.

And putting that into perspective swimming etc is not allowed in Shannon Creek Dam to keep it “pure”.

Desalination: It could use estuarine water, but as the estuaries have lots of other stuff in them, realistically it would have to be offshore water.

If my memory is correct your docs indicated that desalination would be economical. Hmmm!

“Desalination plants are very expensive to maintain and require a lot of energy. Energy is reported to be the largest single expense for desalination plants, accounting for as much as 70% of the costs to make drinking water from the sea.”

Although the Wonthaggi plant is on a much larger scale, its statistics are interesting: It cost \$3.5 billion to build and \$700 million/year to maintain, irrespective of whether it is operating or not. It also uses 90-120MW of power to operate, which is about 10X the power of a traditional water treatment plant of a similar size.



Also have you checked with the environmentalists, who hate dams, whether they approve of desalination?

This photo is from a Victorian 2008 article. (I've been following H2O in Oz since about 2004).

Environmentalists are an interesting mob: They don't like dams, or desalination, yet 99% (?) of Australians depend on them for their water.

Obviously religion and reality don't mix.

Hope this gives a few more points to consider, in coming up with your 20-40 water security plan.

