A Water Saving Proposal

Re-circulating
reverse osmosis
reject water

What Is Pure Water?

High quality or pure water is water that has been treated more extensively than standard city water. Pure water has lower concentrations of contaminants. The level of treatment and purity of water varies based on the needs of the users: industrial, medical, commercial, institutional.

There are several treatment methods. Reverse osmosis is one of the most common.

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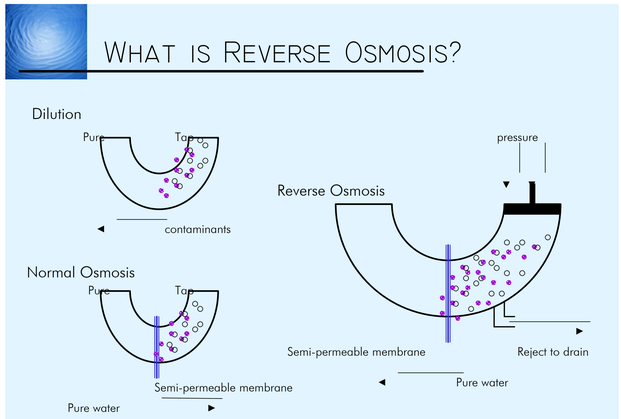
What is Reverse Osmosis?



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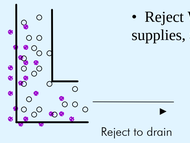
What is Reject Water?



- Reject Water has the same “contaminants” as our city water supplies, at concentrations 2.5-8 times higher.

Iron
Sodium
Chloride
Bicarbonate
Nitrate

Conclusion: Reject Water is High Quality Water.

Why should it go down the drain?

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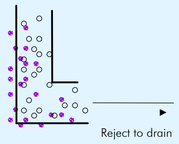
How Much Reject Water?



Reject will range from 30-60% of the Pure Water Systems Output Capacity.

2.5 GPM Pure = 1.5 GPM Reject

10 GPM Pure = 3.2 GPM Reject

A 100,000 SF Laboratory space may use 3,000 gallons of Pure Water per Day, produced at a rate of 5 GPM, rejecting a total of **1,500** gallons of water per day.

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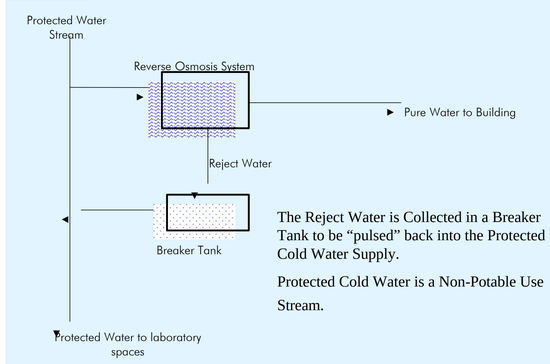
How Can We Use Reject Water?



The Reject Water is Collected in a Breaker Tank to be “pulsed” back into the Protected Cold Water Supply.

Protected Cold Water is a Non-Potable Use Stream.

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What are the Concerns?

- Chemical
- Biological
- Regulatory
- Economics
  - 1,500 gallons of reclaimed water per working day amounts to $2800.00 saved water and sewer costs per year.