

21/9/23

* Desalination (~~off~~) of water

The process of removing common salt (NaCl) from the water is known as Desalination.

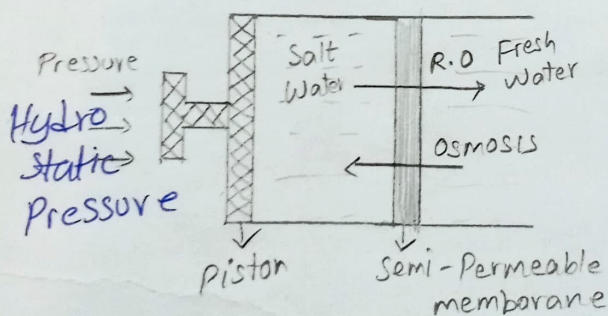
- Fresh < 35,000 PPM (Parts Per million)
- Ocean > 35,000 PPM

* ~~Reverse~~ Osmosis [Super filtration] = R.O

When two solutions of different concentration are separated by a semi-permeable membrane, solvent flows from a region lower concentration to higher concentration.

* Reverse Osmosis.

Solvent flows from higher concentration to ^{lower} ~~higher~~ concentration.



∴ cellulose,
cellulose acetate
(type of membrane)

Fig 1.1

Advantages:

- * In the process of R.O salt water is converted into fresh pure water. (Super filtration)
- * The membrane used are cellulose acetate, cellulose diacetate.
 - i) It removes ionic and non-ionic particles.
 - ii) Due to the low Capital cost;
 - iii) low operating (easy)
 - iv) sea water → Fresh water