

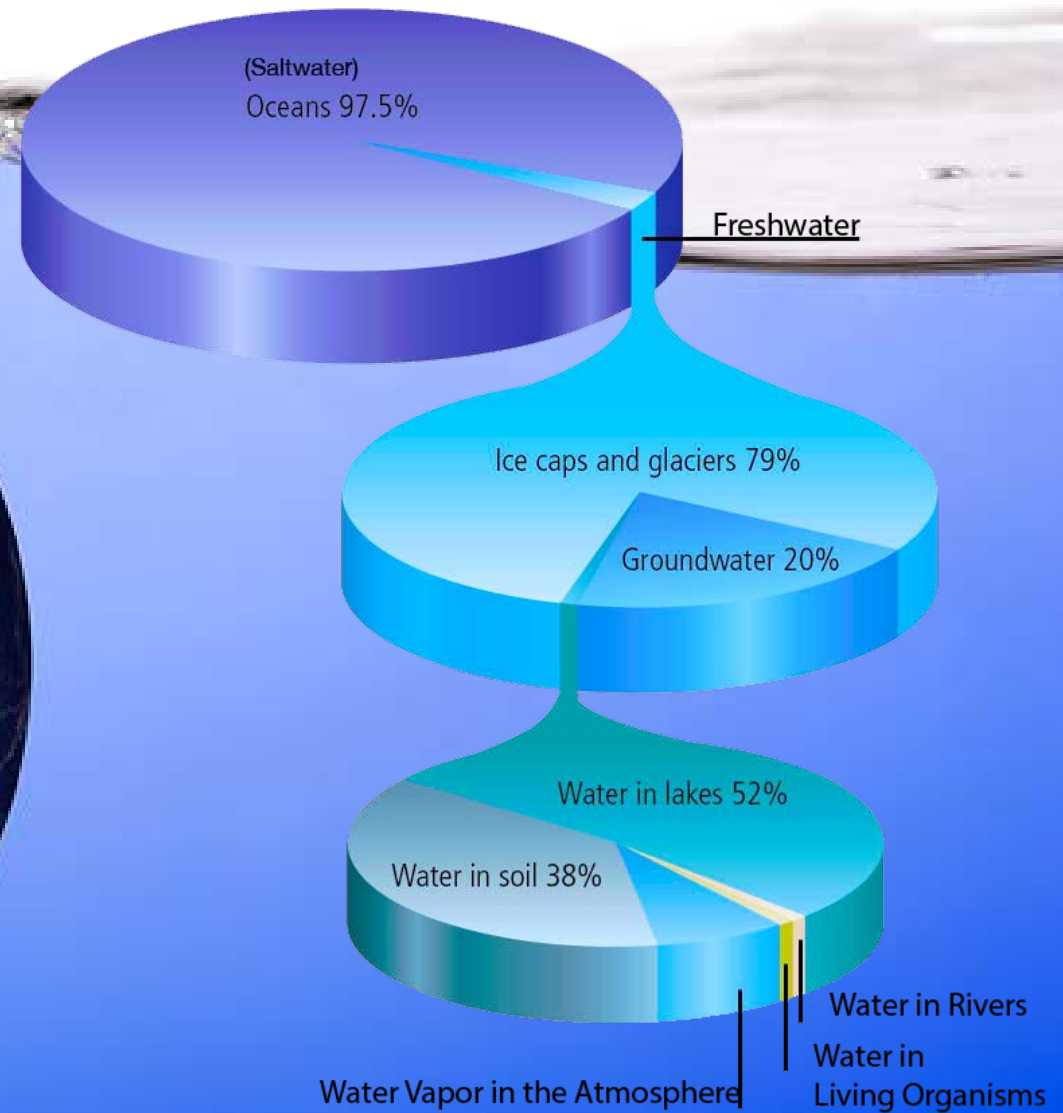


The Breakthrough in Desalinating Saline Waters

The Opportunity

Presented By
Reliable One Resources

Water Sources on Earth, by Percentage



Capital Costs for Desalination

Seawater Desalination Vs. Municipal Water Treatment

- Municipal Water Treatment Plants = \$2.50/ gpd
- Municipal Desalination Plants = \$7 to 36/ gpd
- Municipal Desalination Capital Costs are Approximately 3 to 14 Times More Expensive
- Desalination Typically Requires Substantially More Infrastructure, Land, and Resources

Energy Costs for Desalination

Seawater Desalination Vs. Municipal Water Treatment

- The Average Energy Required for Municipal Water Treatment
 - Between .079 and .661 Kilowatt Hours per Cubic Meter of Water
- The Average Energy Required for Desalination
 - Between 3.0 and 25.0 Kilowatt Hours per Cubic Meter of Water
- The Projected Energy Required for the SA-100 Desalination System
 - .05 Kilowatt Hours per Cubic Meter of Water
- At the National Average Cost of Electricity, \$0.10 per Kilowatt Hour, Desalination of one Cubic Meter of Seawater Water Varies from \$0.29 to \$2.49 more than Municipal Water Treatment, and \$0.30 to \$2.50 more than the SA 100
- The Average American uses 11 ½ Cubic Meters of Water Each Month

O&M Costs for Desalination

Seawater Desalination Vs. Municipal Water Treatment

- Annual Cost for Municipal Water Treatment = \$.22/Mgd
- Annual Cost for Municipal Desalination Plant = \$1.20/Mgd
- O&M Cost for Municipal Desalination = 5.5 Times Higher than Water Treatment
- Municipal Desalination Requires Extensive Backwashing of Membranes, up to 50% of the Treated Water
- The SA 100 Requires no Backwashing or Wasting of Treated Water Resources
- The SA 100 Membrane, as Part of Reliable's Process, Will be Free From Sludge or Oil Fouling

The Reliable One Solution

The SA-100

- Our Patented Desalination System
- Utilizing Bleeding Edge Technologies
- A Proprietary and Patented Filtration Media Developed by Our Engineers and Independent Researchers
- Low Cost of Unit Production, Energy, And O&M
 - Unit Costs Aligned With Typical Municipal Water Treatment Equipment
 - Extremely Low Energy Usage and Costs
 - Water Production Costs Equal to Municipal Water Treatment
- Extremely Small Footprint
 - Suitable For Remodels and Plant Updates
 - Suitable For New Construction
 - Suitable For Temporary, Portable, and Emergency Plants
- Self Cleaning, does not require backwashing
- Near 100% Efficiency - Virtually All Incoming Saltwater is Converted to Fresh Water
- High Profitability
- More Cost Effective Than Municipal Water Treatment
- Virtually no Membrane Fouling due to Sludge and Oil
- Salt Ions are Removed and Isolated via an Air Knife



Average Composite Costs for Desalination

The SA 100 Vs. Municipal Treatment

Municipal Costs:

Municipal costs = \$2000/ acre-foot
(325851 gal)
= \$.00614/ gal

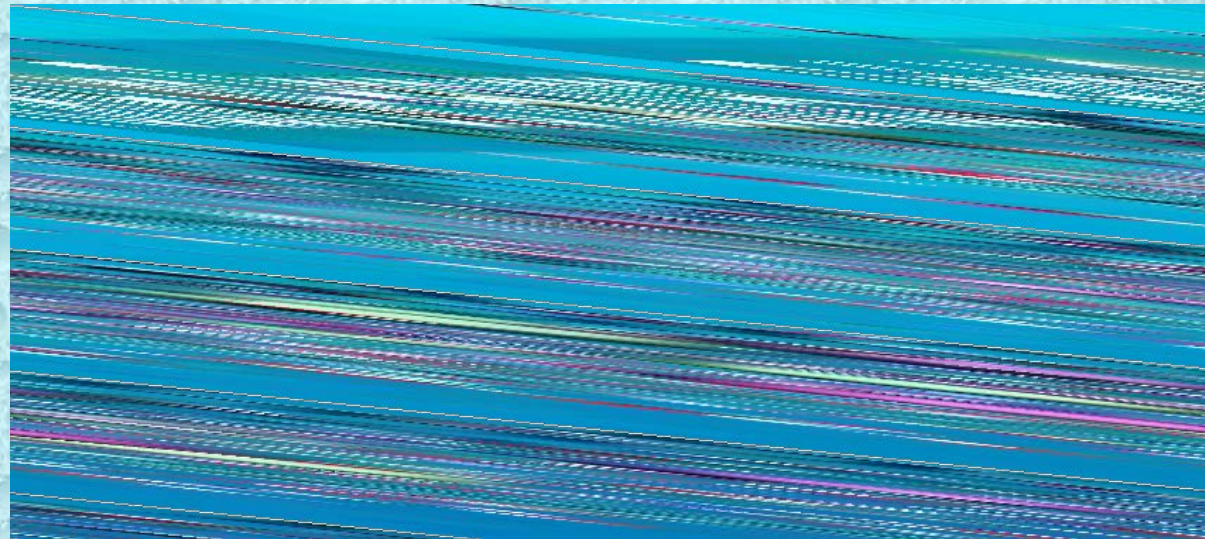
SA 100 Costs:

Cost of Unit = \$125,000
Cost of Belt = \$50,000
Replace belt annually
Misc maintenance costs @ \$5000/ mo
Throughput of 250 gpm, 360,000 gal/ day
Electricity required = 6 kw

Daily costs of electricity @ \$0.10/ kwh = \$14.40
Daily cost of Belts = \$136.98
Daily cost of maintenance = \$166.67
Prorated Cost of Equipment, Daily based on 50
year life = \$ 6.85
Total Daily costs = \$ 324.90
Cost/ gallon @ 360,000 gal/ day = \$.000903
(15% of municipal desal)

The Reliable One Filtration Media

- Interlocking and Overlapping Carbon Chains
- Sequesters Salt Ions While Allowing Water Molecules to Pass Through
- Requires Minimal Pressure
- Designed For Durability and Longevity
- Self Cleaning and High Flux Rate
- Salt Ions are easily Removed Via an Air Knife



In this example, the salt ions (purple and green) are rejected on the top of the membrane, while the water molecules (red and white) freely pass through

Industrial Applications of Desalination

Including Treatment Market Value in 2025

• Municipal/ Seawater for Fresh Drinking Water	\$2,602 Billion
• Oil and Gas, Production Water Cleanup	\$5,508.5 Billion
• Petrochemical Seawater Desalination	\$1,955.2 Billion
• Power Generation, Reuse and Recycling	\$1,950 Billion
• Food and Beverage, Reuse/ Recycling/ Purification	\$7,924.1 Billion
• Microelectronics, ultrapure water recycling	\$2,264 Billion
• Pulp and Paper, boiler water descaling and recycling	\$777.5 Billion
• Mining and Minerals, discharge treatment	\$1,572.7 Billion

Utilizing The SA 100 and Membrane

- Cost factor alone will allow for this unit to be utilized in any industry requiring desalination
- Operational costs lower than municipal water treatment is a truly disruptive technology - desalination will become cheaper than treatment
- Current technology will replace existing equipment
- Future developments will replace existing membranes
- Low infrastructure requirements and small footprint allow for ease of transportation and installation
- Scalable technology, from residential units to today's largest RO plants