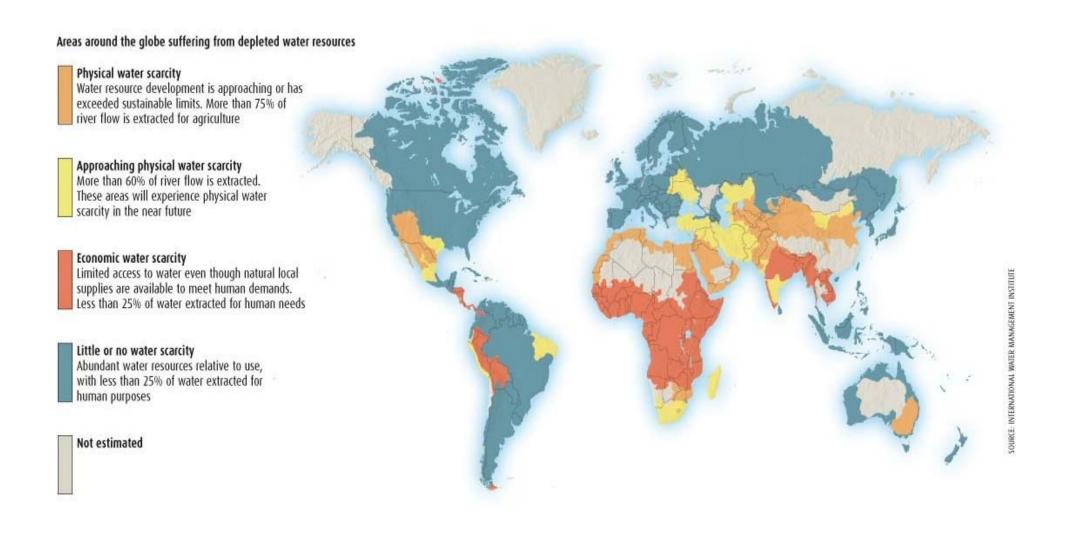
# ENPRO 354



# Background

- Global demand for water is increasing
- World population is growing
- According to UN, 8.9 billion people by 2050
- Increased urbanization drains resources
- Emergence of new global middle class throughout the developing world.
- Climate change is affecting rainfall patterns, inducing floods, and creating drought.
- Industrialization and agricultural runoff is contaminating freshwater sources.
- People most affected by this are those living in underdeveloped nations.



# **Small Scale Desalination for Global Water Solutions**

# Solution

• Creation of a non-profit organization, named *FreshSea*, that would provide small scale desalination units, powered by renewable energy, to coastal communities in underdeveloped nations.

- Desalination by reverse osmosis
- Powered by wind, solar, or a combination of both for off-grid operation.
- Utilize already existing technology to reduce costs and reliability issues.
- "Social entrepreneurship" venture
- Return-on-Investment comes in the form of positive impact

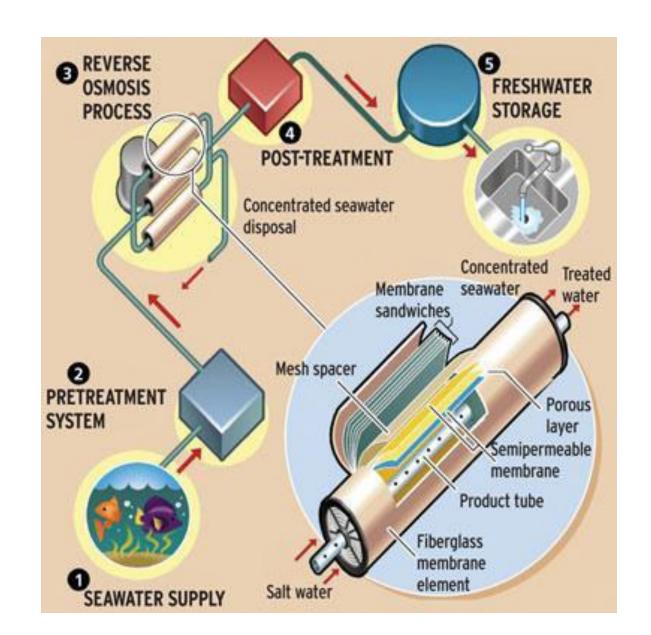


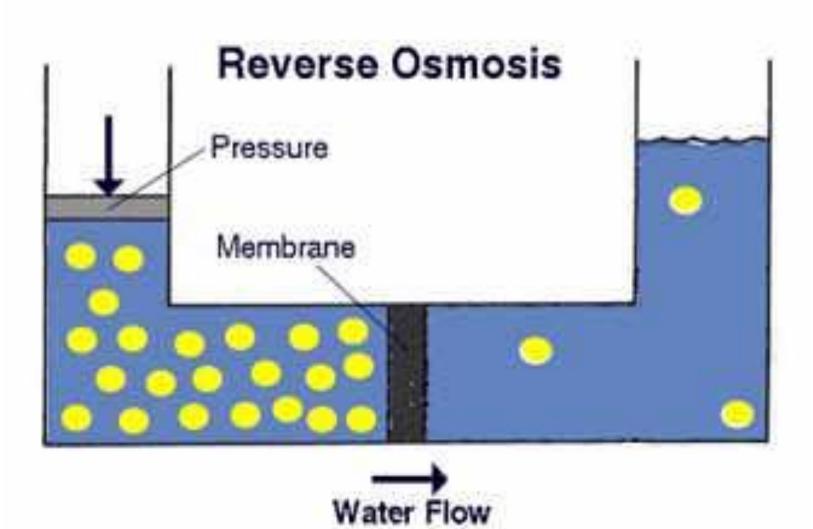
**Reverse Osmosis Unit:** ainDance Water Systems: RDWS-WH-SWRO-2000

### Marketing Value – provide the means to provide for themselves

- Liberation from dependence
- Barriers
- •Strategic Partnerships

# The Science of RO















ILLINOIS INSTITUTE OF TECHNOLOGY

# Fundraising

- Foundations and Trusts
- Grants
- Corporations
- Individual Donations

# **Risk Factors**

- Political or Social instability
- Funding shortfalls
- Product quality problems
- Power source reliability
- Theft of unit/parts

# **Desired Social Impact**

- Improve quality of life
- •Foster economic growth
- Ensure social and political stability