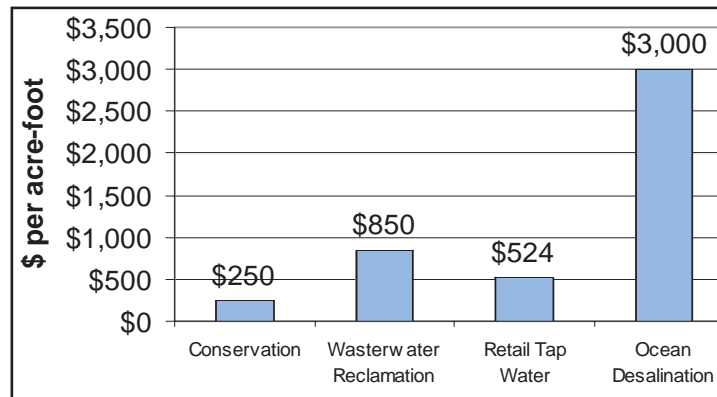


**OCEAN DESALINATION:** *The process of removing salt from seawater either through evaporation or by forcing the salty water through tiny membrane filters in order to make fresh, drinkable water.*

## HIGH ECONOMIC COST...

So far, there are no functioning, large-scale desalination plants in the United States. However, a number of private companies are proposing more than 30 ocean desalination plants along the coast of California alone. Most of these proposed plants are near the last remaining open space corridors where the lack of water has limited development.

These water barons are working hard to take a public resource and turn it into global profit at the expense of rate payers and the environment. They view the ocean as an endless reservoir with the potential to supply expensive water for growth. Multinational companies usurp government's responsibility to provide affordable, safe drinking water for all. Desalination is expensive - it costs anywhere from three to ten times



more than freshwater sources. Due to the high price associated with the construction and maintenance of the plants, users could be faced with huge rate hikes. The water companies could market the water to the highest bidders who can afford to pay the hefty price of desalinated water. The desal industry is aggressively lobbying officials at the local, state and federal levels for government handouts, leaving less funding for other alternatives like community-based conservation programs.

## ...WITH MANY ENVIRONMENTAL RISKS

Ocean desalination plants are a serious threat to sensitive coastal areas and marine life that are already over-exposed to human impacts. Urban sprawl and population growth, urban runoff, and sewage have already caused untold harm to our oceans. Large-scale ocean desal plants would allow currently pristine coastal open spaces to grow without limit due to the promise of more water.

Corporations like Poseidon Resources are aggressively planning proposals to “co-locate” ocean desalination plants alongside coastal power plants so that they can use the intake water from the power plant cooling systems for desalination. Rivers of water are sucked up for these cooling systems from the ocean in a process where 100% of all marine life is killed, then dumped back into the ocean.

A number of the proposed desalination plants are to be built in estuaries, which are sensitive breeding grounds for aquatic life and the nurseries for young fish. In addition, toxic discharges of highly concentrated brine, or highly concentrated seawater, into the ocean can destroy sensitive marine habitat, such as rocky habitat where fish forage and live. Desalination could set back the recovery of Pacific coast fisheries by perpetuating inefficient and polluting power plant intakes.

These coastal power plants should be retrofitted or shut down, as required under Section 316 (b) of the Federal Clean Water Act, but desalination would breathe new life into them and prevent any improvements on these outdated systems, leading to increased energy usage, more air pollution, and exacerbate climate change.

## DRINKING WATER QUALITY CONCERNS

Public health experts have warned that desalinated water might not be safe to drink. The ocean has toxins that aren't found in other water sources such as Boron, algal toxins (red tide) and endocrine disrupters. It is unclear whether or not these harmful toxins can be removed through desalination.



## WHO ARE THE DESAL WATER BUFFALOES?

### POSEIDON RESOURCES

Based in Stamford, Conn., this company claims to “assume the risk” of developing seawater desalination plants so that local governments can focus on other priorities. But if Tampa Bay is any example, the company is not to be trusted. Now Poseidon has signed a deal with the San Diego Water Authority to build a plant in Carlsbad, Calif., where the price tag is estimated to be \$270 million. Poseidon is also pushing hard to build a plant in Huntington Beach, Calif., dubbed Surf City and known as one of the most polluted beaches on the west coast. Community members are demanding that the beaches be cleaned up before another industrial plant is added to their coast.

### CALIFORNIA-AMERICAN WATER (CAL AM)

California American is the largest privately-owned water company in the U.S. Its corporate parent is the German energy conglomerate RWE and its operated by the British-based water baron Thames Water. Cal Am is currently trying to build a large desalination plant at Moss Landing near the Monterey Bay National Marine Sanctuary on California's central coast. There is a ballot initiative in the Monterey area for a public takeover of Cal Am, much of which is concerned with the private ownership of the desal plant.

### METROPOLITAN WATER DISTRICT of S. CALIFORNIA

The MWD, the largest water district in the U.S., serving 17 million people in southern California, is offering a \$250 per acre-foot subsidy for potable water produced by plants built and operated through a sponsoring member public water agency. (An acre-foot is one acre covered by water one foot deep, or about 326,000 gallons. An acre-foot provides the needs of at least two families, in and around their homes, for a year.)

### Others to keep an eye on:

San Diego County Water Authority, Bureau of Reclamation (a federal agency) and U.S. Army Corps of Engineers. The membrane filter industry and the power plant operators are also major proponents of ocean desalination.

## TAMPA BAY: A FAILED POSTER CHILD

In 1999, Connecticut-based Poseidon Resources hooked Tampa Bay Water Authority on a plan to build the largest seawater desalination plant in the United States (with a capacity of 50 million gallons a day). During construction, Poseidon went through several building companies, each declaring bankruptcy after working on the plant.



Pridesa, owned by the German energy conglomerate RWE and operated under British-based Thames Water, has now taken over the project. They promise to get the water running for an additional \$29 million. Angry Tampa Bay residents are wondering who to hold responsible for this costly, failed experiment: politicians, corporations or both?

The same cast of characters moved to the west coast where, with higher energy costs, stricter environmental constraints, and a dying marine ecosystem, the proposals of plants twice the size, 50 mgd or 25 mgd, make even less sense.

### *Tampa Bay Debacle:*

Once touted as the poster child for desalination, this plant has cost over \$200 million, endured the bankruptcies of three different “private partners” is running three years behind schedule and still hasn't delivered water as promised.

## HELP BLOCK OCEAN DESALINATION!

Water for All is actively challenging the expansion of this backward-looking technology. Here's how you can help:

- 1) **Get educated on the alternatives!** Some key web-sites on water conservation include Pacific Institute ([www.pacificinst.org](http://www.pacificinst.org)) and California Urban Water Conservation Council ([www.cuwcc.org](http://www.cuwcc.org)).
- 2) **Get organized!** Encourage your local water agencies and elected officials to invest first in conservation and water recycling.
- 3) **Tell Congress** and state officials to oppose public subsidies to the desalination industry as a waste of taxpayer money.
- 4) **Join the Water for All campaign** at [www.wateractivist.org](http://www.wateractivist.org).

## RESOURCE GUIDE

These organizations protect safe, affordable public water and healthy coasts:

- ~ **Public Citizen's Water for All Campaign**, Washington, D.C.  
(202) 588-1000 \* [cmep@citizen.org](mailto:cmep@citizen.org) \* [www.wateractivist.org](http://www.wateractivist.org)
- ~ **Surfrider Foundation**  
[jgeever@surfrider.org](mailto:jgeever@surfrider.org) \* [www.surfrider.org/a-z/desal.asp](http://www.surfrider.org/a-z/desal.asp)
- ~ **Sierra Club**  
[metropulos@sierraclub-sac.org](mailto:metropulos@sierraclub-sac.org) \* [www.sierraclub.org](http://www.sierraclub.org)
- ~ **Coalition for Responsible Desal** (CORD), Monterey, Calif.  
[responsible\\_desal@yahoo.com](mailto:responsible_desal@yahoo.com)
- ~ **Statewide Desal Response Group**, Santa Monica, Calif.  
(310) 829-1229 x232 \* [connere@west.net](mailto:connere@west.net)
- ~ **Residents for Responsible Desalination**  
[www.hbdesalfacts.org](http://www.hbdesalfacts.org)
- ~ **California Water Impact Network**  
[www.c-win.org](http://www.c-win.org)

### READ THESE REPORTS:

California Coastal Commission “Desalination and the California Coastal Act,”  
<http://www.coastal.ca.gov/energy/14a-3-2004-desalination.pdf>

California Department of Water Resources, Task Force on Desalination.  
<http://www.owue.water.ca.gov/recycle/desal/desal.cfm>



# Recklessly Tapping the Oceans

DESALINATION:  
Unsafe and Unsustainable

A project of the Water for All Campaign

