

# Ocean's not a likely fresh-water source here

By BOB SMITH  
STAFF WRITER

*"Water, water everywhere and not a drop to drink."*

That lament (first intoned by Coleridge's "Ancient Mariner") describes many of California's coastal cities as the fifth drought year begins to make its impact felt on the state's populace and its water-dependent economy.

Desalinization, as a result, is becoming more and more viable in many parts of the state. Santa Barbara is already building a desalting plant to supplement its dwindling water supplies.

The Monterey Peninsula and Morro Bay are looking at the possibility of using the technology to supplement their water resources.

The technology — either steam distillation or reverse osmosis — is used around the world, in places like the Persian Gulf and desert islands in the Caribbean, to produce millions of gallons of fresh water daily.

But in Santa Cruz County, the process remains a curiosity.

Cost is the biggest reason. A study conducted by Mike Munson, assistant general manager for the Soquel Creek Water District, shows that the Midcounty district's water prices would increase five-fold if desalinization became

the main water source.

The district, which furnishes water to customers extending from Capitola's 41st Avenue south to La Selva Beach, now spends about \$382 an acre-foot for the water it pumps from an extensive network of water wells.

Munson said recent studies for various coastal California cities put the cost of seawater desalinization at \$1,800-\$2,200 per acre-foot.

About half the cost is the energy required to either heat the water or power the pumps that force fresh water through special plastic membranes that screen out the salt and other impurities.

Once the fresh water is produced, there is another problem facing the plant operator — how to dispose of a very concentrated brine that's left over.

Coastal desalting plants typically pump the brine back into the ocean without major environmental problems.

But when the plant is treating brackish water sometimes found miles inland from the ocean, disposal becomes very expensive.

Then, special containment ponds and other measures raise the total costs significantly, Munson's report indicated.