

*This is the first issue of our new "Quarterly Communicator". This new vehicle along with RMWD's existing website expands our ability to better inform the public. A broad range of topics, covered in greater depth is the "Communicator's" focus. Your feedback on in this area or on any topic is always welcome.*

### **RMWD Governance**

A five member Board of Directors elected by the registered voters of Rainbow's area runs the RMWD. The Board sets the policies and ordinances, which are carried out under the direction of Rainbow's General Manager. They meet the 4<sup>th</sup> Tuesday of each month at the District headquarters located at 3707 Old Highway 395, Fallbrook, CA.

Your involvement as a Rainbow water user is very important. The last election in August, 2009, was settled by *two percent* of those people registered in the district. Issues affecting water in our area need public involvement and input.

This year three Board members are up for reelection, and two of those Directors, Bob Lucy and George McManigle, are running unopposed for their seats. The third Board member, Rua Petty, has decided not to seek election after seven years of service on the Board. He will be replaced on the Board by

Paul Georgantas, who is also running unopposed. The new terms will begin in January 2011.

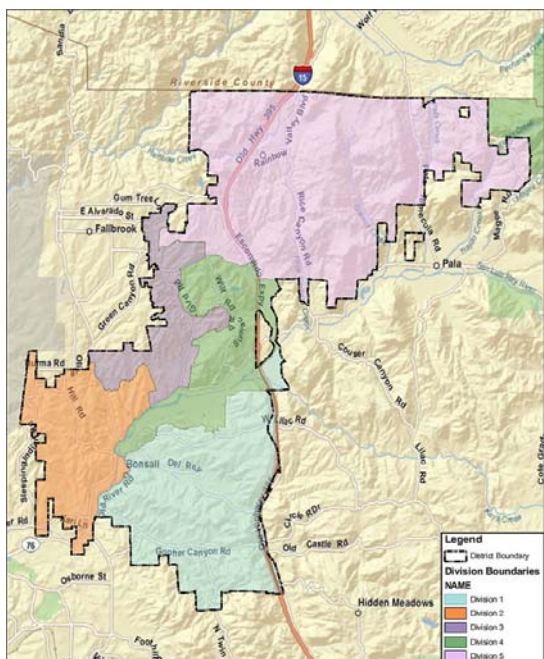
We encourage you to speak with your local board member if you have concerns or questions about your water service. To find out who your representative is, go to the Rainbow website (rainbowmwd.com). There is a larger map which shows each division with the name of the Director representing that area.

### **AG WATER MONITORING REQUIREMENT IS COMING SOON!!**

***Producers with more than \$1,000 in gross crop sales eventually will be required to finance all or part of the costs to monitor agricultural pollutants in nearby surface water.***

As early as January 1, 2011, agricultural and nursery growers must declare their intention to participate in the Agricultural Water Monitoring Program requirement adopted by The California Regional Water Quality Control Board. Under the program, growers must pay to sample and test water quality in nearby lakes and streams, either independently or as part of a group. The testing will determine how well farmers are doing at keeping pesticides and other pollutants out of water systems. Testing could cost individual growers as much as \$15,000 a year, however, growers can cut this cost significantly by joining a group. RMWD formed a monitoring group for our customers—joining our group is voluntary.

For more information go to: <http://www.rainbowmwd.com/Uploads/RMWD%20Monitoring%20Group%20application.pdf>



## **DRINKING WATER FROM THE PACIFIC OCEAN**

"Water, water everywhere but not a drop to drink", words from The Rime of the Ancient Mariner by the English poet Samuel Taylor Coleridge written in 1797. In the current circumstance that we in San Diego County find ourselves with water use restrictions and ever increasing water rates all the while sitting astride the vast Pacific Ocean, makes the words above applicable to our lives today.

We are not alone, fresh water is in short supply in many parts of the world. The World's fresh water consumption rate is doubling every 20 years, outpacing by two times the rate of population growth. It is projected that by the year 2025 water demand will exceed supply by 56%. Clearly, there is a critical worldwide need to better manage our current water resources and access new ones.

Oceans make up 97% of the world's total supply of water. We all survive on the 3% of the total water supply that is fresh water. Unfortunately 66% of this very small amount of fresh water is locked up worldwide in snow and ice; leaving only 1% in lakes, rivers and ground water for mankind, plant life and animals on which to survive. How about taping our vast ocean resources? – you ask.

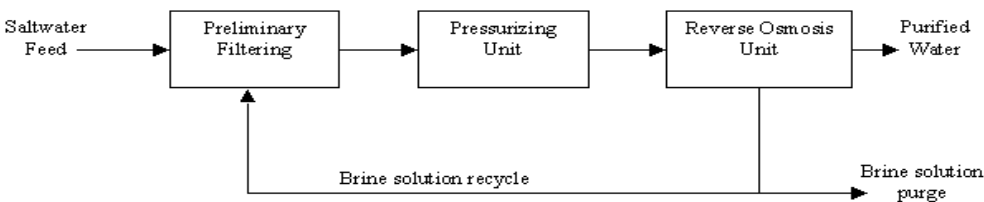
Rainbow Municipal Water District (RMWD) sees these factors impacting San Diego County and is taking actions to better meet user requirements by helping broaden supply options and supporting the newest technologies in obtaining fresh water from the nearby Pacific Ocean. They have been one of the local water districts to support from early on the planned Carlsbad desalination plant. After decade of planning and years in the state's permitting process, Poseidon Resources' Carlsbad Desalination project is now receiving final approvals from required regulatory and permitting agencies in the state. This desalination project will provide San Diego County with a locally-controlled, drought-proof supply of high-quality water that meets or exceeds all state and federal drinking water and irrigation water standards.



**Poseidon Water Treatment Site-Carlsbad**

We are not the first in California to take such action, Santa Barbara and Avalon have already begun using desalination technology to remove the salt from seawater and make it suitable for drinking. Desalination is broadly used and growing rapidly worldwide.

The higher cost of desalination has kept this process from being used even more broadly versus traditional water supply purification procedures. A promising scheme to desalinate seawater is the "reverse osmosis" method. As a desalination technology it improves the cost equation. Continuing technological breakthroughs plus the scaling up of the number of plants and their output water capacities will very likely lead to continuing cost reductions over time.



To achieve complete success and to be acceptable here in California many key environmental concerns must be effectively dealt with by the industry and by Poseidon Resources in their planning, construction and over the life of its operations. One environmental concern with this type ocean water desalination plant is the highly salty

waste byproduct that was removed from the newly created fresh water. This is sometimes referred to as "brine", (see diagram above).

These and other environmental issues are being addressed by Poseidon. By example, to limit the environmental impact of returning this brine to the ocean, it will be diluted with other streams of water entering the ocean, such as the outflow of cooling ocean water from the electric power plant located at the Carlsbad site. Also this brine, as a standalone commodity, is not without value and the industry is pursuing various repurposing alternatives versus pouring it all back into the ocean. One example is as an efficient source of salt itself via evaporation schemes; for use on our food, animal salt licks, winter street ice removal, etc. Another example is in creating a pure molten salt solution, used as a primary recyclable heat transfer media in place of water/steam in large solar electric generation facilities worldwide.

Full and final agreement between Poseidon, some key Southern California water agencies and government groups still requires a complete nailing down. It is a fair assumption that we can, in the next few years, expect to become beneficiaries of these desalination efforts.

**Another resource for ratepayer information or feedback: questions they have or topics they would like to see covered is the RMWD website [www.rainbowmwd.com](http://www.rainbowmwd.com)**