

" ALL OF THESE LANDSCAPES ARE EXPERIMENTS.WE DO NOT KNOW YET IF THIS APPROACH, OR ANY OTHER, CAN RESULT IN TRUE SUSTAINABILITY IN ARID LANDS.THE RECORD OF THE PAST IS NOT ENCOURAGING. "

is the oasis, a well-watered island, usually created by wells or natural springs. In modern times, oases are more often cities where water has been brought, for better or worse, by artificial means. Once it is there, urban dwellers usually ignore the natural aridity of the environment and use water in prodigious quantities. This pattern of use produces volumes of once-used wastewater, which is commonly viewed as a disposal problem. The Centre for Regenerative Studies at California Polytechnic University at Pomona works with regenerative processes for using and re-assimilating water and other materials for both liveability and sustainability. In dry regions, even where a great deal of water is available, it is important to use it sparingly and to good purpose and to cycle it continuously in ways that follow the patterns of natural systems. Too much water in the wrong place can pose greater ecological problems than too little.

At the Centre, partially treated wastewater from the nearby Pomona Sewage Treatment Plant is given advanced treatment by aquatic plants in open ponds. Following this treatment the water is used very sparingly for aquaculture and irrigation before it is filtered through the soil into groundwater storage. The irrigation system uses the drip or trickle principle for minimum water consumption and the plants watered are mostly food crops mixed with a few species that follow the pattern of dryland adapted species mentioned earlier. It is a human oasis with carefully managed water flows, and the landscape reflects that character.

It is important to say at this point that in the long term, all of these landscapes are experiments. We do not know yet if this approach, or any other, can result in true sustainability in arid lands. The record of the past is not encouraging. All of the great dryland civilisations have eventually declined to small numbers of people living at subsistence levels. The long-sustained desert societies are mostly nomadic and poor. Perhaps our knowledge and technical skills will allow us to adapt more successfully with grace and beauty, and perhaps not.



