

IWVWD PRESS RELEASE – April 23, 2008  
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## **THE SHOW MUST GO ON – IWVWD “REDUNDANCY” VITAL**

At a party, if your colleague referred to your conversation as “redundant,” you wouldn’t take it as a compliment. Indeed, the Merriam Webster dictionary uses the term “superfluous” in its primary definition of that word.

However, on the Broadway stage, key character roles require understudies so that, in case of illness or injury to one performer, another can step in. This policy ensures that when “the show must go on,” it does. This is a different example of the redundancy concept.

Water agencies provide safe, clean water for their consumers. No matter the weather or the demand and in spite of mechanical malfunctions or unexpected contamination – not uncommon in aging infrastructure like ours - water must continue to flow under every conceivable circumstance.

Accordingly, the Indian Wells Valley Water District continues to plan and budget for increased storage and pumping capacity. As population increases, so does water consumption. Uninterrupted water flow of high quality and sufficient quantity is our goal, now and for decades to come. And this flow capability must accommodate the highest rate of seasonal usage we experience – often known as “peak demand.”

All water purveyors calculate peak demand, which is the maximum amount of water it takes to satisfy their customers’ needs and is usually expressed over a short period of time –an hour or a day, for example. Accordingly, “peak hour” refers to the actual time frame of highest demand. In the IW Valley, peak demand occurs during summer months when temperatures soar and boost irrigation requirements, evaporative cooler usage and the filling or topping off of pools and spas.

Once these “peak” numbers are calculated, the Water District needs to ensure it can provide enough water to every tap, faucet and spigot within its system when called upon to do so. And doing so, through projected Valley population gains, was and is the cornerstone of the IWVWD’s Water Supply Improvement Plan.

The two main facets of supplying ample water during peak usage are production capacity and storage. Storage is considered a short-term solution – good for hours or even days. The District completed work on two new storage tanks holding a total of three million gallons just last year. Construction on yet a third new tank, to be located in the Belle Vista area, will begin in a matter of months.

Production capacity, on the other hand, is expressed as water produced in a unit of time, typically as gallons per minute. And it is imperative for a water agency to have more wells than it needs for peak demand - so it can continue to deliver its precious commodity

even if a well goes down. And wells do go down, even in systems that practice the most stringent maintenance routine, as we do. We could experience mechanical failure, an earthquake or biological contamination – even a hit during a lightening storm can stop a well from functioning. But as long as we have more production capacity than maximum demand, we can provide our customers with clean, safe water. This, in a nutshell, is redundancy.

There are other aspects of our pumping and distribution system that require redundancy. For example, in the event of a power failure, the Water District has invested in backup generators that run on diesel fuel or natural gas. These generators are located at various well and booster pump sites.

As you can see, the IWVWD has invested in a number of long-term strategies that are designed to provide our customers with water even in emergency situations. These strategies are incorporated into our District planning and the concept of redundancy is one vital building block of that planning. If you are interested in learning more about Water District operations, contact us at 375-5087. We are here to serve you.