



## Drought, When Will It End?

By **KEVIN P. BREEN, CGCS**

I, like a lot of people, have always felt a connection to the natural environment and in particular the weather. The type of weather that you can feel, the kind that makes your hair stand up and notice the power of nature. The Coastal and Bay areas are not the areas that are known for weather like that. The dramatic storms that contain high winds, lightening, hail, etc. like you see devastating the mid west are literally on a different level. However, California is experiencing severe weather, and has been for a while it just may not have raised hair on end.

My formal education includes a meteorology degree, and I have been watching and predicting weather for my work as a golf course superintendent for 26 years. In the San Francisco Bay area the weather kind of lulls you to sleep. The daily temperatures don't change much, and unless there is rain in the forecast there really is not much going on. And there has not been anything going on for a very long time, with little reason to believe that it is going to change in the near future. There are larger global forces at work here that influence our weather.

The subtleties of the weather in Northern California are dependent upon sea surface temperatures, and those don't change quickly. Most of the weather on our planet is influenced by the 71% of the surface that is water. The temperature of water changes slowly and when the sea surface temperature is not normal, then the normal weather pattern changes as it has this year and it is not changing back quickly. Right now things are stuck in an upper air pattern of a ridge over the west coast and a trough over the east part of the country.

California just had its driest year on record, and maybe you no-

ticed, and if you did possibly you are thinking that things could get bad. For a golf course superintendent, things got bad last winter. We have been dealing with salts in the soil all summer and now into winter. I don't want to bore you with the hardship of providing a surface for recreation this past 12 months when there might be much more dire consequences coming with drinking water availability and water restrictions. The point is, the weather is dramatic right now, you just may not have noticed just how dramatic because it has not been a hardship.

So when is this weather going to change? That is a big question, and frankly most people who make a living answering that question agree that the change has happened. We might be in the new normal for our lifetimes. If this is the new normal we will adapt and change because that is what we all do as a species, and it may not be dramatic in the short term. But from my experience, the long term climate and the resulting short term weather have changed. Don't expect an apocalyptic Hollywood ending to life as we know it, but do expect that your life will change because of the weather.

To keep up on the current sea surface temperature anomalies go to; <http://www.ospo.noaa.gov/Products/ocean/sst/anomaly/>

For national long and short range forecasts and discussion (including sea surface temperatures) go to: <http://www.cpc.ncep.noaa.gov/products/forecasts/>

For current California reservoir water levels go to:

<http://cdec.water.ca.gov/cdecapp/resapp/getResGraphsMain.action>

For current California snow pack moisture go to:

<http://cdec.water.ca.gov/cdecapp/snowapp/sweq.action>

## RIP Buddy

Sadly, we acknowledge the passing of a GCSANC celebrity in Buddy, Keith Kaminski's most loyal employee and Chief Nap Officer of Kaminski Golf. Most of the tenured members of GCSANC know Keith. And you can't know Keith without knowing Buddy, whose favorite job was napping underneath the tractor on a sunny day. Buddy passed peacefully and quietly on Super Bowl Sunday while napping at Keith's feet. We should all be so lucky to pass similarly. We will miss Buddy but we will rest easy knowing that he is forever napping under a New Holland tractor on a sunny day.

