

As a team, we want our members to get a better understanding of why certain cultural practices i.e irrigation, are being implemented as they are. The following is a brief summary for your information and contains a few general questions which are answered to give better clarity.

- Contrary to belief, the golf course is not being overwatered. This is based on what our neighbouring golf courses are using per sprinkler on greens, tee boxes and fairways and Westlake is nowhere near them in terms of the amount of water being put down per night. Furthermore, if you compare Westlake's water usage for the month of February, we are averaging daily water usage of 1.5 million litres per irrigation cycle, versus 1.75 million litres in 2019 and 1.65 million litres in 2018.

The facts are that we have used less water in February than we have for the past 3 years.

So how we can be using less water when people are of the opinion that this is the wettest the golf course has ever been?

It is agreed that the golf course is too wet, but not overwatered. There are however a few reasons for this:

i. Firstly, if you reduce the amount of water being applied to the fairways (as has been suggested), like we did in early to mid-February due to complaints of the golf course being too wet, we end up losing Poa Annua (as we did unfortunately). Once it is gone, there is no amount of water that will bring it back before the end of the season. It is for that reason that we had to start applying more water towards the end of February to ensure that we maintained as much of the Poa Annua as possible for the SA Ladies Open. Some people may dispute this, but Poa Annua during the summer lives on a knife edge and if you try and push it just a little too hard, it can fail on you without any prior warning.

ii. Secondly, out of all the grass species in circulation today, Poa Annua is the most salt sensitive by far (see attached picture). This in itself complicates matters even more, as our effluent water is filled with salt. So when you try to dry out an area of fairway, the salt will start to accumulate in the soil, as you are no longer moving the salt through the soil profile via irrigation. Over time, when the salt gets to a certain percentage in the soil, the water will actually start to move in the opposite direction and will move from within plant into the soil, instead of from the soil into the plant. This results in the Poa Annua dying due to a lack of water. The only way to keep the Poa Annua alive during the summer months, is to keep the water moving past the roots, thereby flushing the salts through the soil profile and prohibiting the accumulation of salt in the soil profile. It is also for that reason that we have to spike the greens as often as we do, followed by flushing the greens with irrigation water. As mentioned above, the minute the water stops moving through the soil profile, we start to pick up problems with the greens. Case in point... Steenberg GC could not keep their greens alive throughout the summer, until they stopped irrigating their greens with salt heavy effluent

water. The reason for this? As mentioned before, they could not move the effluent water sufficiently through the soil profile and this resulted in the repeated degradation of their greens. We unfortunately do not have the luxury of fresh water for our greens, but because we have implemented the above-mentioned preventative measures, we have managed to make it through the past few summers with very little, or no damage on our greens.

There are patches on fairways that have completely died, which look terrible and then there are parts of fairways which are so wet underfoot that you cannot make proper contact with the golf ball. What is the reason for some of our fairways being in such a bad state?

- As mentioned above, it is not because of overwatering that the Poa Annua has died. The reason is actually the exact opposite. It is because we have not watered the Poa Annua enough. We could do a little experiment on the course to demonstrate how this works. We can select an out-of-play area on the golf course that will be over watered on one side and under watered on the other side. We can then monitor this area and see in which area the Poa Annua survives.
- Certain areas are wet. This problem has two causes:
 1. Firstly, some of these areas are wet because of too much irrigation being applied (we fix this by adjusting the run time of the sprinkler). In saying that, keep in mind Raymond is trying to manage over a 1000 sprinklers to perfection which is simply not possible. Also, as the season progresses, all of the irrigated areas' specific water requirements change which means that the irrigation system is constantly being fine-tuned.
 2. Secondly, most of the wet areas are actually as a result of excessive thatch that has accumulated in that specific area. Once you have too much thatch (thatch is an accumulation of organic material that acts like a sponge) the specific area becomes water logged and can only be repaired by removing the sod and soil and by replacing the soil with a more porous sand. This we have done on many areas like the front left hand side of the 14th green and the left hand side of the 1st green surround, to name just two.
A good example of an area that needed to be done for the SA Ladies Open, was behind the 18th green, which in itself is a great example of what has happened elsewhere on the golf course. The area was identified as being too wet. The irrigation was reduced and before the kikuyu had a chance to dry out, the Poa Annua died and needed to be re-sodded. That gives a small glimpse of how tricky the balancing act is between too much and too little water.

Our greens have been inconsistent for some time with most of that time being so wet that pitch marks are being left from chips just off the green. Should this happen in summer time on a golf course?

- This would be a generalization and incorrect, as the average green speed for the month of February was 9ft 8 inches. Any golf club in the country would be more than pleased with those greens speeds for the middle of summer. Also, keep in mind that we

are the busiest golf club in the country, have arguably the worst irrigation water in the country and we are trying to keep Poa Annua greens alive in the middle of summer. That being said, this past weekend and 2 weekends ago, the greens were wet. Both of these instances were directly after we spiked greens and as was mentioned earlier, after the spiking the greens, they need to be flushed thoroughly to remove salt and also need the extra irrigation as they dry out very quickly after being spiked.

It seems we prefer the approach that "green is better". Our course looks beautiful but it is not conducive to good golf and this seems to have been the case for some time now.

- No-one likes a moist golf course, but what they like even less is a dead one. What a golfer calls green, a greenkeeper calls alive. In a perfect world we would have Bent grass greens and Kikuyu throughout the rest of the course (and we hope that with the members' assistance we can get there). This would allow us to always have the golf course firm and fast (salty irrigation water would also not be a problem, as both of these grass species are extremely tolerant to excessive salt). The game could be played as it should be, on a firm and fast surface.

You cannot have Poa Annua fairways that are firm, fast and alive with the quality of irrigation water we have.

The Superintendent at Steenberg GC is dealing with exactly the same issues as we are. He is being told that he is over-watering the golf course and he is telling the golfers that if he dries out the golf course, he will lose the Poa Annua on the fairways, which he has confirmed has already happened on certain fairways. It remains a balancing act.

In summation, the scenario we are faced with is very complicated with many contributing factors. Our team are doing their best and even though that does not always deliver a perfect golf course, given the circumstances we are faced with, it is our best effort and the results are a testament to this.

Lastly, also worth noting is that often the evenings' irrigation cycle only finishes at 7am, so if you are playing golf in the early morning it will be much wetter than what it will be for the afternoon field.