What the R&A say -

The R&A is responsible for the running of the Amateur and Open Championships, and provide best practice guidance on all aspects of golf course management.

What are their thoughts on the drought?

Steve Isaac, Assistant Director of Golf Course Management, R&A, said as far as facts and figures are concerned, then best practice suggests:

Golf should be played on firm and dry surfaces, so over watering is to be avoided.

Turfgrasses can withstand a period of drought without the need for irrigation, i.e. sprinklers are not, generally, switched on at the first sign of dry weather. Some grass species are better than others in this regard.

During prolonged drought, irrigating golf turf should only compensate for evapotranspiration losses, i.e. around 30 mm a week. This equates to approximately 4 mm or 40 cubic metres of water per hectare a day.

The average golf course covers 60 hectares. The vast majority of courses in the UK only water their greens, green surrounds and teeing grounds, approximately four hectares. How much water is used to a 60-hectare field of crops?

Established and mature turf absorbs and retains moisture in its organic profile. Mature turf acts like an insulation blanket, reducing water loss to evaporation from the soil.

Golf course irrigation is, usually, carried out through the night when evapotranspiration losses are at their lowest and accuracy of coverage tends to be least affected by wind.

Irrigation systems should be designed and installed to apply water as efficiently as possible, thus minimising waste.

Automatic irrigation should be used merely to keep grass alive and to keep the soil to naturally receptive areas suitably moist. This minimises the risk of wastage through run-off.

Watering by hand is recommended to top-up areas that may shed water applied through the sprinkler system.

The combination of sprinkler use and hand watering minimises water wastage and produces consistent playing surfaces.

Maintenance practices such as aeration and use of wetting agents are employed to encourage deep rooting grasses and ensure penetration of any water applied, thus minimising the amount of water required.

Course Managers should routinely monitor the health of the turf and moisture content of the rootzone to ensure they only water when it is necessary. Weather stations are often employed to more accurately determine when irrigation is needed.

Properly constructed modern golf greens work on the principle of the perched water table, which retains moisture in the profile to minimise irrigation needs.

Globally, golf clubs and their Course Managers are well aware of their responsibility to use water as efficiently as they can and there are many examples of this in relation to turfgrass selection to minimise water consumption, or to facilitate the use of alternative sources, to potable supplies, the use of recycled or 'grey' water and the development of grasses and technologies that enable the use of sea water for irrigation purposes.

**Further information on water management can be found on The R&A best practice website:** [www.bestcourseforgolf.org](http://www.bestcourseforgolf.org)