THE FIRST DROUGHT ORDERS FOR 11 YEARS HAVE BEEN ISSUED IN THE SOUTH EAST. HOW WILL THIS AFFECT OUR GOLF COURSES?

With the onset of drought conditions, irrigation restrictions imposed by the Environment Agency, look set to add to the woes of greenkeepers this season. JDIH (Water & Environment) Ltd is concerned that greens and fairways will suffer unless steps are taken to offset the reductions in water abstraction.

As the drought impact spreads and deepens, the Environment Agency can impose cutbacks on spray irrigation, leading to problems at key growth stages resulting in lower quality overall. James Dodds, Managing Director of JDIH (Water & Environment) Ltd, urges greenkeepers to liaise with their local Environment Agency office, to help minimise the impact of the abstraction reductions. He adds: "Early discussions will help greenkeepers and course management, to plan their water requirements over the next few critical weeks and months. Only by good planning now will problems be minimised in the future".

There are some situations where water usage is not classed as spray irrigation, but it is important that groundstaff understand exactly how their situation relates to the Spray Irrigation (Definition Order) 1992, to ensure that they don't come into conflict with the Environment Agency.

**EMERGENCY VARIATION OF LICENCES FOR SPRAY IRRIGATION**
Under Section 57 of the Water Resources Act 1991, in the case of an "Exceptional shortage of rain" the Environment Agency has the power to:

- **Impose a temporary reduction on the quantity authorised in a licence for abstraction, for the purpose of spray irrigation - this has the potential to directly affect golf courses, driving ranges and putting greens.**

- **Restrictions on abstractions from surface waters are likely to be commonplace during a drought, however, restrictions cannot be imposed on groundwater abstractions, unless an abstraction is thought by the Environment Agency, to be having an effect on the flow, level or volume of a surface water feature, such as: a stream, river, pond or wetland.**

The Act requires restrictions to be imposed evenly - specific uses of water cannot be taken in isolation, or specific users targeted in isolation. There are a number of situations where water usage is not classed as spray irrigation, by virtue of the Spray Irrigation (Definition order) 1992:

- **Where the water is mixed with substances to protect plants against pests, disease and weeds, or quality additives / growth regulators / nutrients / manure or dung - provided the apparatus is moveable.**

- **Irrigation of plants grown in pots / containers in the open where they are unable to take moisture from the soil.**

- **Irrigation of land in the immediate vicinity of cloches for the purpose of securing a supply of moisture to the plants growing within.**

**WHAT THIS MEANS TO ABSTRACTORS**
These powers affect spray irrigators - such as golf courses. This only applies to irrigators who abstract water for direct use. It does not apply to irrigators who abstract water during the winter, to be stored in reservoirs for subsequent use in the summer.

JDIH (Water and Environment) understands, that the Environment Agency will seek to gain voluntary reductions in abstraction quantity rather than to impose reductions. For instance in some areas, the Environment Agency has already spoken to some growers and has obtained agreements with them as to how a drought will be managed.

In other areas, the Agency has encouraged night time irrigation where appropriate, to reduce losses of abstracted water through evaporation. In order to get voluntary restrictions the Agency will need to negotiate or discuss arrangements with a representative body. In the last main drought this proved the impetus for setting up "Abstractor Groups", which have continued to provide support and liaison for abstractors within an area.

If no such group exists in your area, then we strongly recommend that you discuss your abstraction with your local Environment Agency office - especially if you are in one of the sensitive areas (Southern, Thames, Anglian).

If the drought continues and river flows are low next autumn and winter, then abstraction for winter filling of reservoirs may be at risk in certain areas, particularly where baseflow to streams is low, due to low groundwater levels. Winter fill abstractors should monitor the situation and, if possible, reduce the amount of water used this summer.

What are your thoughts on how the drought might affect our golf courses? Write to me, Melissa Toombs, at: Greengkeeper International, BIGGA HOUSE, Aldwark, Alne, York Y061 1UF, or email me at: melissa@bigga.co.uk

Look out for more information on the affects of the drought next month.