

# HOSEPIPE BAN FOR MILLIONS

By Tamara Cohen  
Science Reporter

**TWENTY million people will be hit with hosepipe bans tomorrow to cope with the worsening drought, the Daily Mail can reveal.**

Water companies in the South and East of England, where rainfall has been too low for nearly two years, will announce restrictions affecting one in three homes in the UK. Other areas could soon follow.

The move follows months of concern about the arid conditions, which have seen rivers run dry and reservoirs at record low levels.

In some areas, this has been the driest winter since records began a century or more ago, and weeks of sustained rainfall would be needed to get levels back to normal.

Source: Daily Mail 12th March 2012



IMAGES show the drought of 2006, in that year's Open at Royal Liverpool. Courtesy of Alan C. Birch



BIGGA along with the Golf Club Managers Association is supporting England Golf in its strong attempts to put forward a coherent case for golf clubs to be considered for exemptions. Paul Keeling, England Golf Club Services Manager, explains their position...

**Temporary Bans are not a new thing. Back in 2006 (the last time bans and drought orders were in affect) England Golf ran water management workshops in the Midlands and South, at which experts such as Dr Jerry Knox from Cranfield University and the Environment Agency, all presented historical data that this has happened every five or six years, even before global warming was considered. At the workshops, advice on measures clubs should implement to protect themselves for the future were disseminated.**

**But here we are in 2012, so what are England Golf doing?**

In anticipation of temporary bans, England Golf has made representation to the seven water companies with bans in place, advising of the damage the restrictions will have to golf club BUSINESSES, highlighting that an inability to maintain the biggest business asset (the greens) to a usable standard could result in repair and replacement costs of

tens of thousands of pounds alongside a significant loss of income for clubs. This will naturally have a knock on effect to secondary spend within clubhouses and professional's shops, ancillary supplier businesses could also be severely affected and employment will be jeopardised.

At the date of writing this article only one water company, Veolia, has provided a response.

**What does England Golf suggest?**

We would encourage each club affected by the ban to make individual representation to their water company, and to back up our representation.

I would congratulate Patrick Dawson, General Manager at Burnham Beeches Golf Club, who has also asked the question of the Thames Water Public Consultation Department and received the following reply; an irrigation system is not classed as a hosepipe.

Plus collate supporting information to strengthen your case;

Visitor Income - calculate the income to the Club and the impact

## We Need You!

If your facility is affected by the Temporary Use Bans and you have either received an exemption or have had no joy so far please email us at [info@bigga.co.uk](mailto:info@bigga.co.uk) with your details and the potential impact on your course to enable us to build a clearer picture of the overall effect on the golf industry.

it would have on the business if this dropped off due to poor greens conditions.

Justification of Water Use - It is important to show that current water use is efficient (evapotranspiration replacement) and necessary to maintain the playing surfaces and that water is not being wasted through carrying out the following:-

·Irrigation System Audit - the efficiency and adequacy of your system / water storage measures.

·Reductions made to Current Demands- Records on reductions made to irrigation inputs e.g. watering greens only.

·Agronomic Advice - Specialist advice to help strengthen your case in proving what water use is essential to keeping your turf alive and showing the Club are taking all possible measures to take to reduce drought susceptibility. Also, budget costs associated with remedial work in the event of loss of grass cover.

England Golf working with the Associations, BIGGA, GCMA, PGA etc, will continue to represent golf and support our affiliate clubs in securing access to the ever more valuable resource...WATER.



# Water pressure

How do BIGGA members cope with the mounting pressure from Water Authorities to limit irrigation on the course? Jim Cook interviews four Course Managers from areas affected by the recent hosepipe ban

**The water restrictions imposed throughout much of the south of England in April have caused much confusion amongst greenkeepers in the affected areas.**

Whilst water shortages were not unexpected, some of the sudden and varying messages from water companies were. The news that some golf courses are now categorised as 'gardens' and subject to the same restrictions was a prime example.

This article hopes to highlight the varying experiences of course managers in dealing with increasingly adverse weather conditions as well as muddy regulations from authorities.

**Ian Streeter, Course Manager at West Sussex Golf Club**, has a limited amount of water in a borehole. He said readings taken from this borehole indicated the aquifer that they pump from was at the same level as last year and therefore had not recharged through winter. Ian then is in the position of having water available, but how much he does not know.

He said: "We are limited to 2.5 million gallons, so we can't use any

more than that from the borehole. I've spoken to the Environment Agency and at the moment they're quite happy for us to pump from that well."

Ian had spoken to his water company, Southern Water, about using mains water if the borehole dried up and continued: "Apparently if I need to use mains water, they're quite happy for me to do so on greens only and that is only to maintain them, to keep the grass alive. So that is their take: greens only to keep them alive."

Some golf clubs that draw all of their water from the mains have fallen into the unenviable position of being unable to use their irrigation systems.

In the past weeks, though, a number have already successfully lobbied their water authorities into granting them an exemption from the ban. One example was a club that did not want to be named, in the Thames Water region, and was given an exemption up until June.

The course manager from this club said: "My problem is, is that the exemption we've got currently is right and in place, but if they suddenly come to us and say "no it's

Woburn GC, showing the effects of a drought ridden fairway. Courtesy of Alan C Birch

not" then things become difficult. I think it's a very grey area at the moment."

As the exemption is only up to June, the course manager was thinking about how to water their greens after this time.

"At the moment we've started to collect rainfall, but I would require a minimum of 20 cubic metres per day through the hot weather just to keep the greens alive. After that they would deteriorate and probably quite rapidly," they continued.

**Alan Pierce MG, Course Manager at Ham Manor GC, in West Sussex**, is in Southern Water's region. Alan has an abstraction license from the Environment Agency for 1.6 million gallons per year, for what they determine as the growing season from April until September.

The license applies to the Black Ditch which runs all the way through Sussex to the River Arun and then out to sea. This ditch runs through the course and is water table controlled, so is always at the water table level. As this is Alan's only source of water, he is completely at the mercy of nature when it comes to watering his course.





INSET ABOVE AND LEFT:  
Splendid views of Ham Manor

He said: "As it stands at the moment it is slightly lower than it has been previous years but not so much so that it's causing me any great concern at the minute."

Alan explained that because his club has an older abstraction license, the Environment Agency's 'Hands off Flow Restrictions' do not affect his allowance of water.

"In terms of the position that people are in the one we're in here I'd rather be in than any other because of the older license and being able to physically see how high or low the water level in the ditch is just by going down and having a look," he continued.

Alan gave some figures for how much rainfall had fallen at his course between January 1 and April 1 for the previous three years. In 2009 there was 240mm, in 2010, 249mm, in 2011, 186mm and in 2012 just 54 mm.

**Les Howkins MG, Course Manager at Richmond Golf Club**, in Surrey, is under Thames Water and said: "They're currently saying that you're not allowed to water gardens. Their description of a garden now includes any sports or amenity surface and the only exemption is for national or international sporting events. The only other exemption is on health and safety grounds so

you could possibly argue that if you don't water your greens it's going to be an unsafe playing surface because of the dangerous bounce."

The Environment Agency has sent out questionnaires to all of its license holders, including farmers, golf clubs and sports grounds, asking if they would be willing to reduce the amount of water they extract.

Les extracts water from boreholes for irrigation and has offered to voluntarily reduce his extraction by 25%.

"We'll just have to be more careful. Use wetting agents and ensure aeration is completed regularly so water gets in there. As it happens, since they've imposed the hosepipe ban, it's rained every day. I think for some golf courses it could be a long summer if they're not allowed to water," he said.

**Billy McMillan, Course Manager at Tyrrells Wood Golf Club**, in Surrey, recalled previous drought orders in 2006. He said: "It was probably one of the toughest green-keeping years of my career. One of the toughest things to overcome was explaining to my membership why our course wasn't in as good a condition as they expected."

With a hosepipe ban in place and unable to draw from the mains





**“Coping with the drought in 2006 was difficult. One of the toughest things to overcome was explaining to my membership why our course wasn’t in as good a condition as they expected”**

Billy McMillan, Tyrrells Wood GC

supply, the club successfully lobbied for a limited, yet valuable, supply from their water company.

He went on to explain how lessons learnt from that experience could now be applied to the current situation with regards best practice.

“All those days of deep aeration, organic matter reduction and it has to be said, sometimes painful, operations in the eyes of the golfer will result in a kinder transition through a drought situation. Additionally under drought conditions we wouldn’t want to make for ourselves any additional problems by introducing further stress to the grass plant. Therefore at our club we follow a fairly simple philosophy to include a reduction in mowing levels coupled with slightly higher cutting heights than would be deemed normal in the main playing season. Sometimes we let clippings fly and use them as a mulching on some areas.”

Another interesting point he highlighted was that of public perceptions. He mentioned that when their newly-commissioned irrigation system was being tested during March 2006, it had been raining at the same time. The club received a letter from an irate passer-by who was disgusted to see irrigation on during rainfall. Billy continued:

“So it is important what the general public perceive and can show us in a bad light, so we always have to be mindful of these things in tough times.”

Continuing good practice was something other course managers believed important to prepare for environmental stresses.

Alan Pierce said: “We use wetting agents every month and we’re trying to be as pro-active as we can. We’ve made a conscious effort to go round and check that every sprinkler is only doing the area intended and no more. We do monthly aeration with 8mm solid tines to keep the surface open and the water penetrating through. A big thing for us is that we don’t let anyone play in adverse conditions, such as frost, throughout the winter, so we’re not asking the surfaces to cope with more than they can handle.”

Alan had written a letter to his local water authority highlighting how pro-active and efficient the club was at managing their water, with no unnecessary irrigation. It also stated that irrigation equipment was monitored to ensure its fully working order.

He said: “I’m sure they’re aware that golf courses aren’t just throwing water on, but I wanted to highlight to them that just throwing



**MAIN ABOVE:** Tyrrells Wood Golf Club, how it normally looks (LEFT) and under drought stress (RIGHT)

**ABOVE and BELOW:** more shots of Tyrrells Wood GC



water at our surfaces can be detrimental to what we want to achieve anyway.”

We all know that a staggering amount of water is lost by water companies through leakages, so it is important for golf courses not to be tarred with the same brush.

Ensuring nozzles are not worn, sprinklers are spaced properly and water is distributed efficiently has never been more important. Being sure that irrigation pipes are not leaking is also key to good practice. New Water Regulations Advisory Scheme (WRAS) guidelines have been published relating to marking systems used to convey non-drinkable or non-potable water.





Some water companies are already stipulating that pipework used for these purposes should have WRAS recommended markings. Currently the SportsPro PE100 pipes, by Revaho, are the only PE pipes to come with this mark as standard.

As drawing water becomes less reliable, clubs were looking at contingency plans for the future.

Ian Streeter said his club had installed two 74,000 gallon hold-

ABOVE: Images kindly supplied by Revaho

BELOW LEFT: Dried out turf gives a free hand to drought resistant weeds like creeping cinquefoil and yarrow shown here

BELOW RIGHT: Drought leaves turf with large patches of white clover which continue to grow

ing tanks, late last year, because of water shortages in the past. He added:

“So now we have got a bit more storage, but not enough to last us long-term. We’re thinking about going through planning to try and get our own reservoir put in.

“We think with these water shortages, it’s not going to get any better long-term and we don’t want to risk trying to beg steal and borrow from the water authority or rely on a well that we may get stopped from pumping out of, so we will try and put our own reservoir in if we can get planning. Hopefully from that we can be self sufficient.”

Les Howkins said: “I’ve asked for a quote from a few companies about getting water brought in in tankers just in case we do get cut off. I’ve had prices up to £65 per cubic metre, so if I was going to water just greens I’m looking at about 25-30 cubic metres per day.

“So it soon adds up. I’m lucky at where I work because we could probably afford to do it for a few months if we needed to, but not everywhere could.”

Alan Pierce said he had looked into the feasibility of having facilities for the future where they use their abstraction license on days when it was not needed, to fill up an alternative supply like a tank or reservoir. These were in the early stages of planning.

One of the main causes of contention is how the water companies have dealt with the situation. Les Howkins said: “The water companies should have gone into more consultation with sports grounds, golf clubs and bowling greens. At the end of the day, they are businesses employing a lot of people and if clubs, in the worst case scenario, fold, there will be people out of jobs.

They said that car washers are still allowed to use hosepipes, well for me the golf course is a commercial business and if you can’t maintain the quality of your surfaces, you’re not providing the service to your customers.”

A course manager said: “The water company has now come up and said that you can still use water if you’re cleaning patios down or cleaning cars for a business. So they’re effectively choosing which businesses can use water. This is the problem I have, but they’re not actually writing this down.

If all these ways of getting water are taken away from us and we do have a big heat wave, will there be clubs switching on their irrigation systems regardless because they’re going to lose customers?”

Another course manager echoed this idea and said: “The maximum fine for breaking the restriction is £1,000 so it could almost be worth doing that instead of buying it in.”

The extreme likelihood of mains and other water sources becoming unavailable in the coming months means preparation and action is now the key.

Lobby your water authority, from a business perspective, with the reasons why golf courses need water to operate and highlight your responsible usage.

As examples in this article have shown, lobbying does work and will continue to yield results, which may provide a lifeline for clubs through the summer months.

Because drought problems are not going to go away, it is becoming increasingly more important to store water and a self sufficient club with its own supply would have peace of mind during future restrictions.





# Washdown Areas – what are your requirements?

Richard Stuttard, Environmental Consultant of the STRI, writes...

**The issue of contaminated water discharge from golf course machinery washdown areas is one that is quite rightly currently receiving a great deal of attention throughout the golf industry.**

There is an increasing acknowledgment at club level of the need to ensure golf facilities are operating within the confines of what is increasingly stringent legislation. There is however a great deal of confusion surrounding what exactly is, and is not, acceptable practice. As is frequently the case, the legislation encompassing this issue is quite complex and baffling, leading to many clubs choosing to ignore and claim ignorance, rather than act.

This article sets out exactly what the legislation means to golf and guides you through the options available to your club to ensure compliance.

## The legislation

The key piece of legislation relating to the discharge of contaminated water is the Environmental Permitting Regulations (2010). Replacing the Groundwater Regulations (1997) the purpose of this legislation is to govern the level of pollutants entering surface and groundwater. Environmental Permits to Discharge (issued by the Environment Agency) determine the permitted limits of pollutants, with differing limits set dependant on pollutant type and site location. Pollutants most relevant to golf are nitrates and phosphates (present in grass clippings with levels enhanced by fertiliser applications) which have limit levels typically set at one part per million (ppm) and pesticides, with limits of typically one part per billion (ppb).

If you're thinking that doesn't sound like a lot, you'd be right, however, only minute amounts of these

pollutants are enough to damage ecosystems. The discharges from golf facility washdown areas are typically around twenty times the legal limits specified above. It must be stressed that concentrations of contaminants will vary significantly depending on the amounts of chemicals and fertilisers used on the course, time of year and the extent to which best practice is followed when applying chemicals, but it is certain to be the case that your club is exceeding legal limits by some margin frequently during the course of the year.

## Are you compliant?

If your current practice is to wash machinery on waste ground, or in front of the sheds and allow water to discharge away (with no prior cleansing) to a ditch / other surface water, or allow it to soak away to groundwater you are not complying with legislation unless you have been granted an Environmental Permit to Discharge by the Environment Agency. This is something that all clubs who discharge water (whether it is cleansed or not) should have. This comes at an annual cost to the club and will only be granted if the level of contaminants within the clubs discharge is below the legal limits set for your area, which, in almost all cases, clubs will find it won't be.

To be certain of compliance, your club must be adopting one of the following options:

1. Machinery is washed down on a bunded washpad with all contaminated water collected in a sump, which is then collected and disposed of by a licensed waste management contractor.

2. Machinery is washed down on a bunded washpad with all contaminated water fed into a mechanical water recycling system where it is cleansed and can be re-used or discharged.







3. Machinery is washed down on a bunded washpad with all contaminated water fed by sealed pipe into a dedicated and bespoke reedbed system, where it is cleansed sufficiently for discharge or re-use.

The above options will be legal requirements for the vast majority of golf clubs in the UK, however there are circumstances, relating to the type of substrate water is being discharged to, where a club may be permitted to discharge without prior cleansing. As such, it is well worth a call to the Environment Agency to have your individual situation confirmed.

Equally if you are discharging to foul sewer, the issue is no longer the concern of the Environment Agency and it is down to your local water board to determine whether they are happy for the discharge to be sent through their systems without prior cleansing. It is the duty of the golf club to inform the relevant water board and confirm permission.

There has been a certain degree of scaremongering going on throughout the industry in recent times with threats of quite exorbitant fines being instantly imposed on golf clubs found to be contravening regulations.

The claims of six figure penalties are quite outlandish and should be taken with a pinch of salt. That, said, it is certainly the case that action will be taken against clubs found to be non-compliant with, at the very least, a requirement made for the club to rectify the problem immediately. As legislation tightens over the coming 2-3 years it is likely that fines will be used more frequently as a method of encouraging compliance and as such now really is the time to establish your clubs requirements and begin to set aside funds to fulfil your club's needs.

### Best Practice is important

Following best practice guidelines relating to pesticide and fertiliser application is essential for all users of such products and will ensure that the amount of pollutants being discharged from your facility is kept to a minimum. As such it is crucial to ensure that all operators of spraying equipment are appropriately trained and are fully aware of best practice operating.

### Reedbed Systems

Many of you may not have previous knowledge of the option of reedbed systems to solve your waste water problem. Reedbed

water filtration systems bring with them a raft of benefits to the golf club thanks to their low cost, low maintenance attributes and their natural appearance.

Reedbed systems, when designed correctly, are highly effective cleansing systems with reductions in contaminants facilitated through sedimentation, filtration, chemical precipitation, microbial interaction and plant uptake. Now, you may think I'm trying to blind you with science and that this is some hair brained 'muck n magic' idea with no substance behind it. The truth is however that this is by no means a new technology. Such systems have been in use in a variety of industries for more than 30 years and, over the last 5 years or so, have gained an ever increasing following in the golf sector.

Design and installation of these systems will cost typically between £5000 and £7000 and once installed their maintenance requirements consist simply of an annual clean out of any decaying vegetation at the base of the reeds and a cutting operation every few years to keep the reeds healthy.

Additionally, their attractive appearance means that they can be situated out on the golf course (within areas of rough etc) if space within the maintenance area is short, thereby further enhancing their appeal.

There are a significant number of examples of reedbeds in use within golf facilities throughout the UK and further afield with numbers rising rapidly. As such these systems are certainly worth considering as a viable solution to this pressing issue.

### In Summary

Don't panic! The purpose of this article has been to provide you with a definitive answer to the question of wastewater discharge on the golf course, not to instil panic in those of you who now fear you may not be complying with legislation.

In essence, each facility is different and as such a call to the Environment Agency, or to STRI, who will act on your behalf, will be the first step towards determining your requirements. Once you have answers, you can act accordingly.

The topic is an important one however, and I would urge those of you who have doubts regarding your clubs compliance to look into this issue at the earliest opportunity.

More information can be obtained by contacting Richard Stuttard at STRI on 01274 565131.



# Alternative Washdown Solutions

Authorised water recycling systems for washdowns are exempt from the drought order bans. Two providers of these systems give their thoughts on the situation below..

**Historically, we have always relied on our reservoirs being refilled during the winter. However, two unusually dry winters has left reservoirs, aquifers and rivers well below normal levels in many parts of the country.**

The start of the drought was largely restricted to the south east of the country, which has been in the grip of the worst drought in 30 years since last year. This is now spreading across large swathes of the country, with rivers such as the Tern, Sow and Leadon at their lowest ever recorded levels and the river Lathkill in Derbyshire drying up, requiring an emergency rescue of the fish.

In an effort to preserve water supplies seven water companies covering south-east England and East Anglia implemented hosepipe bans commencing in early April and the Environment Agency are warning water use restrictions may need to be imposed as far north as Yorkshire if the prolonged dry weather continues.

Despite recent rain the drought has continued to spread with official drought zones being declared in a further 17 counties in mid April,

coupled with the warning from the Environment Agency that water shortages could now last until Christmas!

Environment Secretary, Caroline Spelman said "As more areas of the UK move into drought it is vital that we use less water to protect the public's water supply."

With the population of the UK now well past 60 million and heading towards 70 million pressure on water supplies is only going to continue to increase, whether it rains or not. Prudent use of water will be expected by everyone to try and avoid future shortages. The authorities are actively promoting a number of initiatives, including the use of recycled water wherever possible, to assist the efforts to avoid future water shortages.

Golf courses need to ensure they are environmentally responsible and yet many continue to 'waste' up to a million litres per course undertaking the (necessary) task of washing-off golf course maintenance equipment using mains water.

The Waste2Water Recycling Wash-Off System is the perfect answer for washing your equipment in Drought conditions:

- The Recycling Wash-Off System continually reuses the same water, reducing water usage by a massive 90%!

- Is fully authorised for use even during periods of a Drought Order.

With the anticipation that the hosepipe bans and official drought zones will be upgraded to full Drought Orders in the near future, now is the time to upgrade to a Waste2Water Recycling Wash-Off System. If imposed, a Drought Order will ban washing-off vehicles and equipment unless a Recycling Wash-Off System is used. Installing a Waste2Water system ensures you can continue with necessary equipment cleaning operations even during periods of drought.

For more information  
contact Waste2Water  
Tel: 01782 373 878





## Will it take hose pipe bans and drought orders to see legislative compliance? David Mears reports

**The duties and responsibilities of anyone operating a washdown system, the legal requirements and the latest penalties for non-compliance have been covered at length in the media for some time, yet still a number of businesses and golf clubs don't see the need to take action.**

Why? The Groundwater Regulations 2009 are not a recommendation, they are law. Compliance is mandatory and to claim ignorance will not be seen as a defence.

Perhaps the time is right to invest in a biological washpad water recycling system, save precious water and meet your legal duty.

It is potentially only a matter of time before hosepipe bans implemented on 5th April 2012 by seven water companies in the south and east of the UK become Drought Orders. Already the south-east of England and East Anglia are reported to be suffering the worse drought for 30 years. Areas as far north as Yorkshire and as far west as Wiltshire and Hampshire could

be affected we are told.

It was in 2006 that Drought Order powers were granted to only three water companies (Sutton and East Surrey Water, Mid-Kent Water and Southern Water) to limit or prohibit non-essential uses of water and a number of golf courses were badly affected.

Only golf courses that recycled water were able to continue washing off machinery. One such course was Woodcote Park in Surrey using their ClearWater system and featured on BBC TV news. This time, the drought appears to be more serious and widespread.

It seems clear that drought conditions, regrettably, are here to stay probably affecting us each year. Like it or not, we must strive to conserve water and the sooner the better.

Washing off machinery with water running to waste is not only causing pollution but is costly and irresponsible in these times. Water meters fitted to recycling installations have shown that around ¼ to ½ million litres of water could be

wasted washing down equipment at golf courses if not recycled. National Trust's Andrew Mudge calculated their ClearWater recycling system at Cliveden would save them in excess of 200,000 litres of water. Installing a biological recycling washpad system would therefore appear to be a sensible move right now, especially as there are special offers to be found from the major players.

Often the expense of a completely new washpad can be saved by upgrading an existing one too and finance is usually available. Self-installation is possible also in some instances. Further savings can be made if purchasing approved systems.

A system approved and on the UK government-backed Water Technology List (WTL) qualifies for 100% first year capital allowance under the ECA (Enhanced Capital Allowance) scheme. This means that companies / clubs buying and installing such a system can write off 100% of the total cost of their investment against taxable profits in the year of purchase!

For more information contact  
Highspeed Group Ltd  
08456003572

**Not all washpad solutions are the same. ClearWater definitely isn't.**

- \* It is a full biological washpad water recycling system
- \* It is on the Water Technology List, fully approved as a water saving technology
- \* It qualifies for 100% first year capital allowances under the ECA scheme
- \* It is probably the most cost effective system and is safely below ground

Scan QR Code or Call us for more details

Highspeed Group Ltd Newbridge Ind.Est.  
Pitt Street Keighley BD21 4PQ  
Tel: 0845 600 3572 info@highspeed.co.uk  
www.highspeed.co.uk www.clearwatertv.co.uk

*ClearWater*  
Water Recycling Systems