

Southern Water's 16.5% meter saving

An article on page 2 of the April edition of the *Bulletin* gave details of a report on Southern Water's universal metering programme (UMP). *The Effect of Metering on Water Consumption – Policy Note* by Carmine Ornaghi and Mirco Tonin of the University of Southampton is the output of a project supported by the Engineering and Physical Sciences Research Council (ESRC). The report concluded that, '*all in all, our estimates suggest an overall reduction in consumption of around 16.5% due to the programme*'.

A high profile event to launch the report to a wider audience was held in September at Portcullis House in Westminster, part of the Parliamentary Estate. The event was sponsored by Royston Smith MP with ex Water Minister, Richard Benyon, engaged in the panel session.

Simon Oates, Southern Water's Director of Strategy, said of the UMP that '*there was a desire to get it right so other companies could follow. The UMP had speeded up the knowledge base giving leverage to the multiple benefits. It is helping to put customers in control of their consumption decisions. The UMP was not just an asset installation programme but seen as a customer engagement programme*'. He finished by saying that they had applied 'self imposed' incentives to reduce demand as '*the current financial incentive to drive down pcc is fairly trivial, it needs more teeth*'.

Carmine Ornaghi, Associate Professor in Economics at the University of Southampton University, presented the careful and complex analysis that can be found in the report. He observed that the frequency and timing of water bills can have an effect on customers' reaction. Soon after a water bill is received water use appears to reduce.

90% of Southern Water's customers now have a meter and 62% of customers have lower bills with added saving on energy bills. Alarms on meters have detected nearly 7,000 leaks on customer pipes since 2011. The UMP has also helped in securing more than £3.5million of unclaimed benefits for customers.

Further details of the event can be found on page 3.

[\[link to report\]](#)

Philip Turton, Editor



The panel session at the Southern Water event

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Environment Agency



DM bulletin review

In October the Environment Agency will be reviewing the DM bulletin with a view to making it more customer focused. This is your opportunity to let us know how we can improve the bulletin and ensure you are getting the most out of it.

You will be receiving an email with a link to an online survey that will only take 5 minutes to complete. Please take the time to complete the survey as the results will help us to improve the bulletin for you!

Defra

Green deal, no deal

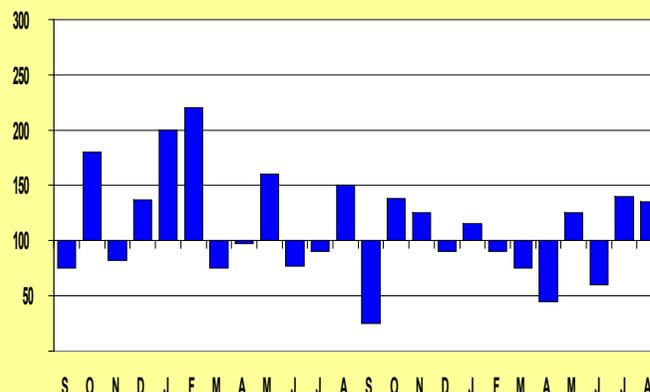
There has been lobbying for water efficiency to be included in the Government's *Green Deal*. Further lobbying on the Green Deal will now be in vain in view of the Government's announcement just before the summer recess.

'In light of low take-up and concerns about industry standards there will be no further funding to the Green Deal Finance Company, in a move to protect taxpayers'. However, the Government did say *'the Government will work with the building industry and consumer groups on a new value-for-money approach'*. [\[link to press release\]](#)

UK

Rainfall 2015

It was relatively dry in the spring and early summer over England, especially in the south. However August rainfall totals were well above average across England for a second consecutive month at 140% of the Long Term Average.



Monthly rainfall totals for Sept 2013 to Aug 2015 as a percentage of the 1961 – 1990 long term average for each region and for England. NCIC (National Climate Information Centre) data. (Source: Met Office © Crown Copyright, 2015).

Waterwise

Tweet meet

Waterwise are organising *Water Efficiency Tweetmeets* on the first Tuesday of every month, using the hashtag #waterefficiencychat. Everyone is welcome to get involved. Waterwise will post a few questions during the hour so *'if you want to comment or talk about stuff you are doing just use the hashtag and join in'*. [\[link\]](#)

Smart Approved Watermark

Waterwise are joining forces with Australia's water efficiency label, *Smart Approved Watermark*, to support innovation in water conservation by expanding the label into the European market. This partnership will see the *Waterwise Recommended Checkmark* amalgamate into *Smart Approved Watermark* for the launch in November. [\[link\]](#)

Water company initiatives

Essex & Suffolk/Northumbrian Water



Kerri Russell gave an update at the WATEF annual conference on Essex & Suffolk Water's programme of work, under the banner of *Every Drop Counts*. In doing so, her presentation was judged as the event's best.

She focused on the *'the whole town approach'* in Billericay, Essex which involved delivering a wide range of water efficiency projects in schools as well as in domestic and business premises. Supported by a huge marketing campaign, *Every Drop Counts* is building a unique brand to encourage the entire community to get involved.

3,009 domestic properties in Billericay have been audited (an impressive take up of 20%) and fitted with water saving devices with combined property savings of over 18,000 litres of water per day. [\[link to presentation\]](#)

Kerri also provided the *Bulletin* with an update on work carried out earlier this summer. Northumbrian Water Group (NWG) launched its third and fourth consecutive whole town water conservation campaign to help thousands of families and hundreds of community organisations and businesses across its northern and southern operating areas.

This year the campaign has been targeting Grays in Essex and Berwick upon Tweed in Northumberland.

NWG kicked off its latest campaign with the launch of their H2eco homes retrofit project in Grays and by attending the Glendale Agricultural Society's Children's Countryside Day where over 1,500 children across Northumberland learned how to save water.

NWG have employed various marketing tools to encourage participation in their project including ITV player adverts, billboard promotions, radio campaigns, newspaper articles, local community promotional stands, bus shelter adverts and much more.

To learn more about the *Every Drop Counts* campaign in the Northumberland area contact Clair Cooper on 0191 301 5579 or, alternatively, contact Kerri Russell on 01268 664934 for information on the Essex & Suffolk campaign.

Severn Trent Water



At the WATEF conference Professor Sue Charlesworth mentioned the on-going *UK Urban Demonstrator Project* in Birmingham. It is a major collaboration with a remit to:

- provide a community scale living laboratory to demonstrate the practicality and benefits of combined water reuse and sustainable drainage
- stimulate innovation and commercialisation of UK water technology
- raise public awareness and support for more sustainable living.
- provide enhancements to existing green infrastructure and tangible improvements to a river corridor.
- monitor, measure and evaluate the costs and benefits (physical, financial, environmental, health and well being) over a five year period.

It is looking at the physical changes in streets and homes as well as the behavioural changes. The table illustrates the extent of the programme.

The project has a wide range of partners including the Environment Agency, Severn Trent Water as well as a number of universities, NGO's and consultants.

	Gardens	Streets + Shared space
Green Roofs	Rain gardens	Tree planters and rain gardens
Rainwater Harvesting	Water butts/tanks	Swales, ponds and wetlands
Grey water Reuse	Porous paving	Porous paving
Water efficiency devices	Driveway de-paving	Surface water separation + reuse
Energy efficiency devices	Misconnection	Improved river corridor
Smart Meters	Downpipe disconnection	Recreation and green spaces
		Cycle and fitness routes

Southern Water

Effect of metering event - panel session - from page 1

Waterwise's Jacob Tompkins praised Southern Water for producing a new data set for the industry to use. He noted, though, with Ireland, Canada and Norway adopting universal metering, the UK is still lagging behind, especially as no part of the UK is immune from drought.

He urged the industry to keep on innovating and move to the next stage. This includes adopting ICT (Information and Communications Technologies) with personalised customer water plans that involves customers storing water in their homes to help in mitigating both droughts and flooding.

Former Water Minister, Richard Benyon, worried that, given there will be future droughts, our collective memory of earlier droughts will become abbreviated. This is why the study is important. He noted that when he was appointed, per capita household consumption (pcc) was about 155 litres/person/day (with London at 165) while, at the same time Berlin pcc was only 105 litres/person/day.

Trevor Bishop, Deputy Director for Water Resources at the Environment Agency, said how Southern Water had been bold and stepped out into a leadership role on metering. Saving water contributes to meeting carbon obligations as well as environmental obligations, especially the unique chalk streams in the Southern Water region.

Water efficiency plan

Southern Water have issued *Saving Customers Water, Energy and Money* [\[link to document\]](#), a summary of their plans for water efficiency. Of the company's twenty six promises to customers about the services to be provided, four are related to water efficiency.

In his introduction, Chief Executive Officer Matthew Wright, said *'we want to reach every one of our customers - whatever their age, location and water use - to help us secure a reduction of six million litres of water/day in the water-stressed South East. This, in turn, will help protect our environment and wildlife'*.

The company have set the target to reduce water use by 15 litres/person/day to 133 litres/person/day by 2020 and report progress each year in the annual report. These include:

- building on the success of the Green Doctor visits
- offer of water audits in Kent, Sussex, Hampshire and the Isle of Wight
- working in partnership with organisations such as housing associations and local authorities.

Southern Water has launched a comprehensive package of water and energy saving device measures for business. By 2020 the company plans to install more than 30,000 water saving products to customers, carry out 16,800 water and energy audits, engage with 250 schools on water audits and educational campaigns as well as work with 250 businesses to generate water and energy savings.

Thames Water

Andrew Tucker reports how Thames Water's *Smarter Home Visits* (SHVs) initiative is going well and is now up to full speed. Five London Boroughs are involved, Bexley, Greenwich, Enfield, Islington and Camden.



There are twenty five 'Green Doctors' from Groundwork employed together with twenty engagement staff. SHV households in Islington, Camden and Enfield are also being offered a free 'leaky loo fix'. So far, 1 in 20 homes are found to have a constant flowing toilet.



The Smarter Home Visits team with Andrew Tucker bottom right

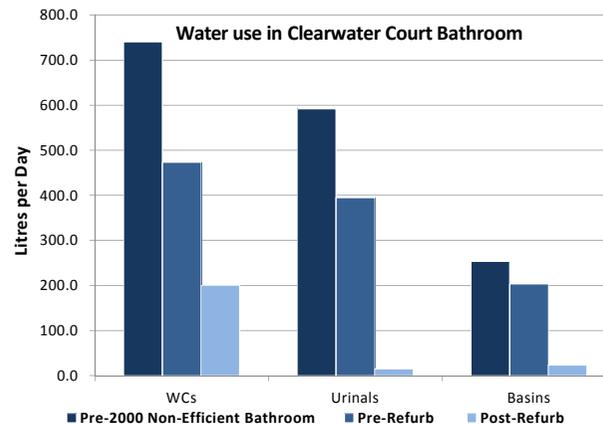
In total, so far, there have been about 9,000 *Smart Home Visits* since April, fitting over 17,500 devices to reduce water and energy bills. Most importantly the customer satisfaction scores have been outstanding.

A water efficiency engagement programme is now being carried out in Oxford involving local radio, TV, online and print media. *[pic below]* Customers can obtain free water efficiency devices and use an on-line calculator to calculate their water use. The opportunity is also being taken to trial a free 'leaky loo' fix for any Oxford household.



Thames Water are keen to '*practice what they preach*' and point out to their customers that they are putting great effort into reducing water use in their own premises. A while ago they made the main toilets in the reception area of the Reading office building water efficient. Now, they have gone a big step further, installing Cistermiser urinal controls, sensor taps and Propelair WCs.

All the devices have been sub-metered and early results are encouraging suggesting an 80% reduction in water use. The company's staff have said the facilities are easy to use and are thrilled with the savings. The graph below shows the results so far for water use before and after the recent revamp.



The Swindon Advertiser featured an excellent article on the *Save Water Swindon* campaign. Karen Simpson, Save Water Swindon project coordinator at Thames Water, is quoted as saying '*I'm absolutely delighted we have beaten our ambitious target of saving one million litres per day.*

This is the result of four and a half years of dedication by our customers in Swindon, Thames Water and our partners WaterWise, World Wildlife

Fund (WWF), ARK (Action for the River Kennet) and Swindon Borough Council' [\[link to article\]](#).

Research Cap and Trade?

Gordon Mitchell, from the University of Leeds, alerted us to his paper, in collaboration with colleague Adrian McDonald, on *Developing Resilience to England's Future Drought: Time for Cap and Trade*. [\[link\]](#)

Published in the Journal of Environmental Management 148 pp97-107 it addresses the fact that '*there are no truly effective incentives to encourage widespread adoption of behavioural and technological demand management practices available*'. The paper proposes a system for developing resilience to drought in highly water stressed areas, based on a 'cap and trade' (C&T) model.

Non-Domestic Food and Drink Federation



Food and Drink Water Use Reporting 2015 (Water Progress to 2014) [\[link\]](#) and the news is good. The table, below, shows that there has been a reduction in water use by 22.9% compared with 2007 baseline.

Reporting is now carried out by the Food and Drink Federation having taken over from the Federation House Commitment (FHC). There is, however, a strong caveat.

The earlier FHC reports accounted for 20% of water use in UK food and drink manufacturing sites but the latest report from 23 FDF member companies (91 sites) accounts for only about half that.

FDF members submitting data reported that they had reduced their absolute water consumption in 2014 by 24.2% compared to the 2007 baseline.

Year	Water use (excluding that in product)	Total water use	Finished product (million tonnes)
2007	21.1	25.0	8.1
2013	16.6	20.7	8.5
2014	16.0	20.0	8.3

The FDF says it is reviewing its *Five-fold Environmental Ambition* with one aim being to build on this current reporting regime and encourage more members to join the water use reporting system.

Domestic

WRAS/Water UK
Water in the home



WRAS (Water Regulations Advisory Scheme) and Water UK have performed a great service by issuing a comprehensive 30 page document *Looking After Water in Your Home*. [\[link to document\]](#)

Although it does not directly set out water saving measures, by setting out information on pipe ownership and internal plumbing it encourages proper use of water in the home. It promotes the WaterSafe [\[link\]](#) website and its seven *Approved Contractors' Schemes*.

Approved plumbers should be able to detect leakage and provide water efficiency advice.

Leakage

CIWEM Leakage Policy Position

CIWEM has issued a *Policy Position Statement* [\[link\]](#) and comes to the following conclusions:

It advises that the role of future leakage reduction in securing reliable water supplies may be over-played in some parts of the UK.

It is essential that the cost effectiveness of leakage reduction is clearly understood by customers in addition to the effective communication of the measurement of leakage performance and transparency around how leakage targets are set and expressed.

Zero leakage is not technically realistic or economically desirable. Nevertheless, CIWEM believes that more data on leakage levels should be made public and shared so that best practice in managing leakage can be effectively promoted.

CIWEM supports performance indicators for leakage which function across companies and geographical locations, such as the *Infrastructure Leakage Index* (ILI).

CIWEM recommends that in the long term all water delivered to customers should be metered. As well as driving improved water efficiency, metering improves performance measurement, which in turn increase detection rates.

CIWEM also emphasises that there is more to reducing leakage than mains replacement. Wider measures such as pressure management and more advanced leak detection and repair technologies should be deployed more extensively in future and are often likely to represent a more cost effective option to reduce pressure on supplies than developing new resources such as large reservoirs.

LeakSuite website

Allan Lambert has informed us that the *LeakSuite* website continues to grow and has a policy of making leakage papers and presentations freely available for practitioners to use and encourage further research.

Over the last two years the number of users and page views have doubled every six months with over 45,000 page views by over 5,000 users from 153 countries. This reflects a growing interest in leakage control worldwide.

After the 'home page', the 'outreach' page (free papers and presentations) is the most visited, followed by blogs, concepts and free software. You can see more of the user analysis at [\[link\]](#), which also contains some info about the latest initiatives.

Conferences

WATEF annual conference



Exeter University hosted The Water Efficiency Network (WATEF) *2015 Annual Conference* and showcased many demand management related developments, particularly in academia and by water companies. The following is a taster of the subjects dealt with at the conference. A full list of the presentations can be found on the WATEF website. [\[link\]](#)

Rainshare

The conference reception was illuminated by a stimulating 'Dragon's Den' styled 'CloudCash' organised by CIWEM's South West Division.



A number of projects were put forward and delegates voted with their 'virtual' money. Dr Sarah Ward and her *RainShare* website won with a prize of £500 together with six months of business support. The award was presented by Ofwat's Mark Worsfold.

RainShare aims to 'connect people with too much runoff with those who need more'. To see how things develop. [\[link to RainShare\]](#)

WATEF committee feedback

The opening session, chaired by Essex & Suffolk Water's Tom Andrewartha, featured feedback from all the recently formed WATEF technical committees.

The feedback, given by Chandler's Phil Barnard and Graf UK's Kevin Reed from the **Water Reuse Technical Committee**, concluded that:

- getting survey response is difficult
- there is not enough focus on 'water issues' in general
- water reuse schemes are often included just to gain points
- too often they are 'budgeted out' !
- water companies need to engage with water reuse schemes.

The feedback from the **Surface Water Management Technical Committee** was presented by Coventry University's Professor Sue Charlesworth.

The on-line rainwater management survey [\[link\]](#) closed on 30 June. The survey was undertaken on behalf of members of the *WATEF Surface Water Management Technical Committee*.

The survey was aimed at individuals with expertise in matters related to floods and droughts, although it also included an opportunity to align personal views with organisational policy.

More than 1,000 individuals were invited to participate in the survey, resulting in 81 responses by the closing date. The survey results can now be viewed at [\[link\]](#). The key findings were:

- Surface Water Management (SWM) included all aspects of water - urban/rural and water supply
- SWM required planning up to 30 years ahead
- SWM should be managed in an integrated way
- predictions of increased flooding and droughts were correct
- capacity-building takes time
- storing water for reuse is important.

The Understanding People Communities Technical Committee feedback was presented by UCL's Sarah Bell. A framework and case study template has been produced. Individual case studies on social housing, traveller communities and schools had been identified. The case study database is to be expanded with a website for dissemination.

Finally, University of Exeter's Sarah Ward gave feedback from the **Service Innovation Technical Committee**.

The WATEF website features details of all the committees together with minutes of their meetings. It transpired that there is much overlapping between the subjects, therefore it has been decided to amalgamate the Water Reuse and Surface Water Management committees.

Scotland & Northern Ireland

WATEF are expanding their network into Scotland and Northern Ireland and Ricardo-AEA's Richard Malloy expressed *'the real appetite for water efficiency in Scotland and Northern Ireland'*. The first meeting was held in Glasgow during August and the first event will be announced shortly.

Resilience

Resilience will be a major feature of the next set of water resource management plans. Demand management is very much part of the debate taking place on the subject.

Dr Mary Gearey, from the School of Environment and Technology at the University of Brighton, presented *Future-Proofing Integrated Water Resources Management: Taking an iterative approach to developing resilience frameworks*. This gave a background to the issues involved.

The panel session on the subject showed that the debate is at an early stage as 'resilience' is still being defined in terms of the water sector.

Water efficiency analysis

Artesia's Rob Lawson presented the results of the study *Statistical Analysis of Water Efficiency, Metering, Rainwater and Greywater Savings*, a project supported by *the Water Industry Collaborative Fund*, including support from the Environment Agency. This is a landmark project which builds on previous water efficiency evidence base studies completed by Waterwise and the Environment Agency.

It uses project design and analysis principles first developed in the UKWIR project *Quantification of the Savings, Costs and Benefits of Water Efficiency*. The project used consistent methods to examine the success of recent water company projects, and then combined these results with previous studies in a water efficiency 'meta-analysis'.

This analysis included a total of 25 water efficiency projects:

- nine recently completed stand-alone water efficiency projects from various companies

- nine phases of Essex & Suffolk Water's *H2eco* programme and seven projects previously analysed in the Environment Agency study *Water Efficiency Evidence Base - Review and Enhancement*, published in June 2012
- three recent metering studies were also analysed.

The project found that:

- on average, water efficiency programmes save water – with a mean saving of 13.5 litres/property/day
- this figure could be increased significantly in the most effective water efficiency programmes
- *H2eco* remains an extremely valuable source of water efficiency data, providing valuable insights *into* the longevity of savings, and the best types of property to target
- savings from South East Water and Southern Water metering programmes were large and consistent – with a mean of around 70 litres per property per day.

The uncertainty around the savings due to metering remains large. Recording consumption at unmeasured households before customers transfer from rateable value to a metered tariff will reduce this uncertainty.

The project only identified one recent rainwater harvesting/ greywater project with water company involvement which included quantitative monitoring. This led to a plea for more monitoring of rainwater and greywater installations in 'real world' situations. If you are interested, you can contact Rob [\[email\]](#).

The presentation and short supporting paper can be found on the WATEF website [\[link\]](#). The main project report is expected to be published in November, following a dissemination event.

Drought Cash for grass

Southern California residents have taken so much cash to take out so much grass that the Metropolitan Water District's (MWD) water conservation program is out of money.



Since December, MWD has set aside \$450 million to encourage Southern Californians to conserve water, \$340 million of which went to the lawn rebate program. [\[link\]](#)

Afterwards Governor, Jerry Brown, called for more cutbacks statewide, public demand for the turf rebate program [\[link\]](#) soared 20-fold, according to the MWD.

Lawn dude

The Southern California Water Committee (SCWC) and Clear Channel Outdoor (CCO) announced the return of their joint *Lawn Dude* water conservation digital billboard campaign. *Lawn Dude*, the nationally acclaimed water conservation mascot, encourages Californians to conserve by using his witty and playful voice to call attention to areas where water use runs high, such as in outdoor landscaping. [\[link\]](#)

Crowdfunded shower

Edie.net reported how a water saving shower crowdfunded almost \$1m in less than 2 days. The Nebia shower claims to be 70% more water efficient than regular showers. [\[link\]](#)

Back to school

Santa Cruz in California is copying the idea of sending traffic offenders to road safety lessons instead of being fined. Residents found guilty of infringing water saving rules are being sent back to

school to learn more about water and how it should be conserved. [\[link to article\]](#)

Drought shaming

The above article also refers to social media-driven campaigns using [#droughtshaming](#) and [#droughtshame](#) where people can 'out' water wasters. [\[link\]](#)

Personal drought report

Valencia Water Company customers will soon receive in the mail updated 'personal drought reports' that specifies exactly how much water they need to save to meet the mandatory 24 per cent reduction in water use during the state's unprecedented drought. [\[link to report\]](#)



California update

In the April edition of the *Bulletin* the drought situation in the western states of the USA was extensively featured.

John Koeller, the Alliance for Water Efficiency's Technical Adviser, kindly provided information that, in some cases, altered the perspective of the headlines.

In the western states of the USA and particularly in California the drought has not only concentrated minds but has led to many statements and initiatives. It is not easy, especially from this side of the pond to discern whether the decisions are based on sound research. It does show the benefits of having drought plans at the ready.

The discussion on water budgets applied to one specific (unidentified) water provider, as it is definitely not typical of what is being implemented. Every one of the 411 water providers in California are responsible for setting their own policies and rates,

so the example provided was only one out of those 411.

The discussion of the California Energy Commission (CEC) only acknowledges what was already in place in California. Hence, their estimates of 'water savings' are gross overestimates of what will become reality

The water efficiency community (including myself and the Alliance for Water Efficiency) strongly opposed the urinal standard proposed and adopted by the CEC, which was one-eighth of a gallon per flush (0.5litres). No research was conducted to validate the efficacy of installing such urinals in 50+ year old buildings with existing urinals of 1.5 gallons (5.7litres) and more. Because ALL commercial buildings must be retrofitted to the new standards before the end of 2018, we anticipate significant building drainline performance problems in the future.

All in all, the Governor Brown emergency in California has given state government the unbridled opportunity to propose and adopt water savings measures without prior study and validation. As such, plumbing performance is threatened and savings will not be as forecasted.

Lost jobs

The US Department of Labour released this press release at the end of July showing the serious economic effect of the drought.

'A recent University of California Davis study estimates 18,000 people lost jobs because of drought. These losses leave working families struggling to make ends meet, and the Department of Labour is announcing up to \$18 million in National Dislocated Worker Grant funding to the state of California to provide jobs for workers dislocated by the drought, with \$3 million released initially.'
[\[link to article\]](#)

Canada dry

Metro Vancouver has implemented the third stage of a comprehensive four-stage plan necessary to prevent any potential water shortages in the future. There is an interesting list of the types of water use that have been restricted.

This includes a complete prohibition on lawn sprinkling until further notice. Metro Vancouver member municipalities will not issue lawn sprinkling exemption permits, and municipal parks, ornamental lawns, and grassed boulevards will not be watered. Residential pools, hot tubs and garden ponds can no longer be refilled, and personal outdoor vehicle and boat washing is not allowed. However, commercial car washes remain open.

Vehicle and boat washing is prohibited, except for windows, mirrors, lights, and licence plates for safety reasons. Residential swimming pools, hot tubs, and garden ponds may not be refilled or topped up. Golf course fairways may not be watered.

Only minimal watering is allowed for greens and tee areas. Water play parks can only be operated with user-activated switches. Power and pressure washing, and washing any outdoor impermeable surface is only allowed for health and safety purposes. [\[link to article\]](#)

If you don't comply with the lawn sprinkler ban, you could face a \$250 fine. Neighbours are 'encouraged' to report violations by using the 'VanConnect app'. [\[link\]](#)

Golf in the bunker?

USGA executive director Mike Davis told the Washington Post that last year's water scarcity was set to become a major problem facing golf. *'We happen to think that, long-term, water is going to be the biggest obstacle in the game of golf. It's not going*

to be a question of cost. It's a question of: will you be able to get it?'

This year the US Open Golf Championship was held at an environmental golf course at Tacoma, Washington. Unfortunately, some of the golfers were not enamoured by the state of the greens. [\[link\]](#)

Cuban drought

Cuba put its civil defence system on alert on Monday due to a year-long drought that is forecast to worsen in the coming months and has already damaged agriculture and left more than a million people relying on trucked-in water. [\[link to article\]](#)

Australia & New Zealand Oz and US research collaboration

Institute for Sustainable Futures (ISF) is to evaluate the strategies used to cope with Australia's devastating, decade-long drought to help inform policies being developed in California.

The research will be conducted in collaboration with US partners, the Alliance for Water Efficiency and the Pacific Institute. Funders also include the Metropolitan Water District of Southern California, the San Francisco Public Utilities Commission and the Water Research Foundation. The Water Services Association of Australia is also participating. [\[link\]](#)

USA & Canada AWE on value of water

In order to convince the public to conserve water it is important that they understand where water comes from and the cost involved in supplying clean water to the home. To address this the Alliance for Water Efficiency has produced a video, *Water, What You Pay For*. [\[link to video\]](#)

World

Ranking the water stressed countries

The World Water Resources Institute has calculated the most water stressed countries in the world by the year 2040. The UK comes in the medium to high risk category. [\[link to report\]](#)

Special drops

Edie.net reports that the Molson Coors brewing company has saved 500 million litres as part of its *Our Beer Print Sustainability Strategy*. [\[link to article\]](#)

Another brewer, Shock Top, is responding to the critical drought situation in California by teaming up with the crowdfunding site *Indiegogo* and state water organisations for a new *Shock the Drought* program to identify, fund and distribute water-saving innovations that have the potential to make a real impact on reducing water usage in the state. [\[link to article\]](#)

Still on the brewery theme, Edie.net reports that Diageo has improved its water efficiency by more than 10% in the past year, according to the drinks giant's latest sustainability report. [\[link to article\]](#)

The World Resources Institute reports that countries from the Middle East are likely be exposed to extreme water stress by 2040, threatening national security. [\[link to article\]](#)

Los Angeles has deployed a total of 96 million 'shade balls' into a reservoir in an effort to save 300 million gallons of water. [\[link to article\]](#)

Diary

6 October - Rainwater/greywater seminar

This Waterwise seminar is being held at WWF's Living Planet Centre. The event will include a tour of this state-of-the-art building including rainwater harvesting. [\[link to event\]](#)

6-9 October - WaterSmart Innovations

The eighth annual WaterSmart Innovations Conference and Exposition is to be held at the South Point Hotel, Las Vegas. [\[link to event\]](#)

15 October - Water UK Annual Leakage Conference

Water UK will be hosting its 16th Annual Leakage Conference in Birmingham at the Crowne Plaza Hotel. [\[link to event\]](#)

25 November - SWIG Awards

The Sustainable Water Industries Group have announced their *2015 Awards Ceremony* and are asking for one A4 page with details about your project, with supporting photos and data, where appropriate. [\[link\]](#)

8-9 December - Future Water Organisation's Leakage/Metering Conference

The Future Water Organisation (formerly SBWWI) is holding the event at the Chesford Grange Hotel. [\[link to event\]](#)

8-9 December - North American Water Loss Conference

To be held in Atlanta. [\[link to event\]](#)

2 March 2016 - Waterwise Annual Conference

The 2016 conference is to be held at RSA House, 8 John Adam Street, London, WC2N. [\[link\]](#)

WATEFCON 2016

Next year's Water Efficiency in Buildings Network's conference theme is *Water Demand Reduction, Scale and Process*. It is to be held at the University of Coventry, date to be decided. [\[link to event\]](#)