



AQUATRINE

SPRING 2012 news

Focus on the drought

It is a pattern familiar to many people – days after a drought is declared, it starts to rain and this year is no exception with heavy rain experienced just days after the first hosepipe bans were introduced. So, just how bad is the drought, and will recent showers relieve it? Dr. Lewis McCaffrey of KWS Defence investigates:

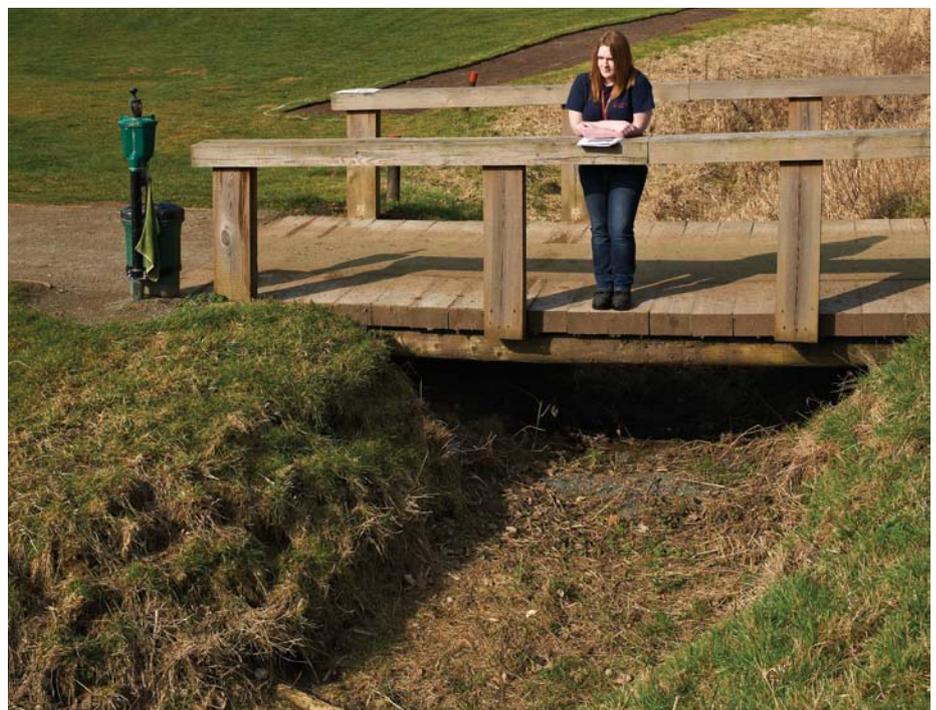
Dry conditions have been localised – across Wales, northern Britain and Northern Ireland stocks in major reservoirs are generally within 10% of capacity. Scotland had record amounts of rain in 2011, and there are no concerns with water supplies north of the border. By contrast, stocks are still below average in parts of East Anglia and the South East. And on 16th April the Environment Agency announced that the South West and Midlands are in 'environmental drought'.

Soils for the late winter were the driest on record, but recent rainfall has eased problems for farmers and gardeners. After two successive dry winters, the drought is still impacting severely on the environment and water resources.

Groundwater recharge over the winter has been meagre across many of the major aquifer outcrop areas and March groundwater levels were close to the lowest on record.

Kelda and C2C, the Aquatrine suppliers in England and Wales, have independently settled on the same solution for monitoring groundwater levels. By using pressure sensors suspended below the water in boreholes, a network of loggers transmits the water levels on a daily basis to water resources experts. The network, which rivals the Environment Agency's in size and sophistication, has been used to provide early warning of the dry period we are now experiencing.

Recent rainfall has been very welcome but, in the absence of exceptional rainfall, in excess of 150% of average, in April and May (by which



Veolia Water's Victoria Maisey, Environmental Projects Officer, at the River Ver in Harpenden

time evaporation demands will be rising rapidly) no early termination to the drought can be expected. Indeed, these conditions are likely to last for several months, and are expected to spread north and westwards.

The drought has led to temporary use restrictions (more commonly known as 'hosepipe bans') being imposed by seven water company across the East and South East. The exact details of the restrictions vary between companies, but they all impose a ban on activities such as washing vehicles, windows, paths and walls; watering gardens; and filling ponds and swimming pools with a hose.

The Aquatrine suppliers use both water company resources and self-abstracted water

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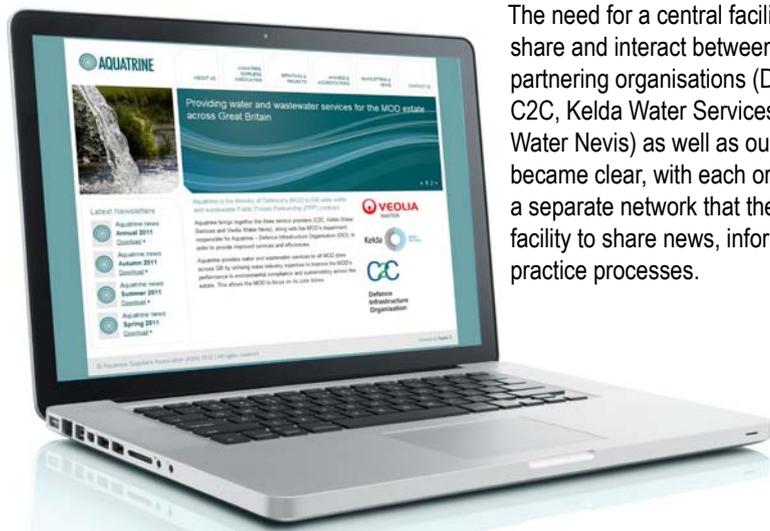
Driving at work

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Aquatrine website goes live!

The ASA PR & Communications group are pleased to announce the launch of the new Aquatrine



website, a dedicated central resource to inform all stakeholders of the mission and work of Aquatrine.

The need for a central facility to inform, share and interact between the four partnering organisations (DIO in MOD, C2C, Kelda Water Services and Veolia Water Nevis) as well as our customers became clear, with each organisation on a separate network that there was no facility to share news, information or best practice processes.

This new Aquatrine website will provide one central location for the ASA to direct both staff and customers to, it will allow somewhere to share information such as the Aquatrine Challenge and latest information via *Aquatrine News*. It will also promote the work we do, demonstrating the day-to-day operational activities and long-term projects being conducted on the water and wastewater assets across the Defence Estate.

The website contains pages on who we are and what we do, industry and estate information, shared initiatives and project updates, while promoting fundraising events and awards/accreditations achieved.

to supply MOD sites. Water company hosepipe bans apply to sites supplied with water company resources. But what about sites supplied from on-site boreholes? In the current climate, no difference should be apparent between the two.

Ian Rawson, Head of Water Supply at KWS Defence, explains: "Our policy is to mirror on MOD sites any temporary use restrictions imposed by local water companies, whether the site is supplied by a water company or our own boreholes".

"We'll always seek to safeguard water resources and respond with whatever practical support we can", he added. "We support the current industry policy to voluntarily conserve water in anticipation of a dry period ahead". The PMO fully support this view and wants MOD to be an exponent of best practice.

Leakage is often cited as a contributing cause of water shortages, but Aquatrine has had a spectacular effect on MOD sites.

"We have reduced leakage in all of our operational areas to the lowest-ever figures, meaning that wastage of water is at an all time low", said Peter Dignan of C2C. KWS has also been working on a water grid on Salisbury Plain to allow water transfer to hard hit areas.

An impending change in legislation in England and Wales is likely to limit the amount of water which may be abstracted in the long term. The Aquatrine suppliers south of the Border will be applying for abstraction licences when these become necessary after 2012.

Water saving tips to help beat the drought!

There's lots you can do to help save water. Taking simple steps can make a surprisingly big difference if we all take them:

- Turn off the tap when brushing your teeth – this can save 6 litres of water
- Using washing machines and dishwashers when you have full loads
- Take a short shower instead of bath – this can save up to 60 litres of water.

There's plenty of tips for the Garden too:

- Fit a water butt in your garden to harvest any rainwater
- Use mulches like bark chips or gravel to retain moisture and keep weeds down
- Use gel crystals in planters or ground soil. These can reduce the need for watering from daily to once or twice a week
- Choose your plants wisely and pick varieties that thrive in dry conditions

– those with the full sun label in the garden centre or check out the Royal Horticultural Society website: www.rhs.org.uk

- Target your watering times. Watering in the blistering sun will result in quick evaporation. Try watering in the early evening and give your plants an overnight quench.
- If you're choosing pots, choose plastic ones that keep the moisture in. Some have reservoirs at the bottom and only require watering once a week.
- Don't water your lawn. Most brown lawns will come back to green again very quickly when regular patterns of rain return
- Reset your lawn mower blades to 4cm to encourage dense bushy growth which traps early morning dew and reduces evaporation. We would recommend letting the grass clippings go on the lawn every third mow.



We're looking for people to go that extra mile for two worthy causes!

Last September many of you took part in the Aquatrine Challenge, covering over 558 miles across the UK to raise an incredible £2,400 for WaterAid and Scotty's Little Soldiers.

This year, we're hoping to smash this terrific target and are looking for willing volunteers to take part and help link the UK's largest Naval and Air Force bases (Clyde and Brize respectively) with the largest Garrison, Catterick, by signing up to get sponsorship and cover a "leg" of the Aquatrine Challenge route by any non-motorised means.

This September, the Challenge will be raising money for WaterAid and Combat Stress and we are encouraging not only Supplier Association members and their families to take part in the Challenge but also encourage any contractors, customers and stakeholders who have a connection with Aquatrine to take part too.

Please help to spread the word, encourage people to sign up (or sponsor you!) and be part of what we're hoping will be the most successful Challenge to date!



Participants complete the two final legs of the route to Catterick Garrison at the 2011 Challenge finale

Want to know more?

Details of the Challenge "legs" will be available on the newly launched Aquatrine website: www.aquatrine.co.uk or you can email your interest to: DIOOpsSouth-aquatrinepmo@mod.uk or to your local ASA PR and Comms Working Group representative.

WaterAid offers practical solutions to provide clean water, safe sanitation and hygiene education to the world's poorest people. www.wateraid.org

Combat Stress is the UK's leading military charity specialising in the care of Veterans' mental health. www.combatstress.org.uk

Every penny raised really does help make a difference to someone's life.

C2C swing into action!

RAF Wattisham is home to a 30 metre high, 1930's concrete water tower, which has started showing signs of visible degradation.

C2C recognised that an inspection was required to assess the level of remedial works and had previously carried out a similar inspection at Topcliffe estate. Here C2C erected large scale scaffolding in order to survey the tower, and were familiar with the risk, disruption and costs associated with this method. So the team took up the challenge to find a safer, quicker and less disruptive way of surveying the Wattisham water tower.

C2C identified rope access (a type of "Abseiling") as a viable alternative to scaffolding, for the reasons suggested by Sanjit Barham, C2C's engineer for the project. Sanjit identified that; "rope access is a lot safer as the equipment is inspected thoroughly before each use by fully qualified IRATA engineers and it is not left out over long periods exposed to the weather.

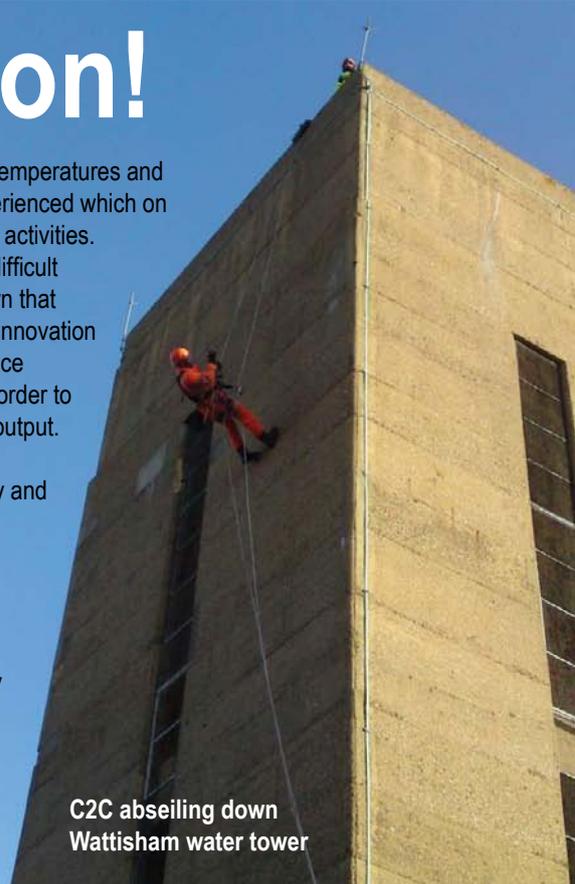
Rope access also involves substantially less manual handling; minimal temporary works design and has a significantly reduced carbon foot print when the reduction in the number of vehicles required for each job is taken into consideration."

Overall, the time saving was a 75 per cent reduction on the traditional scaffolding solution for an asset of this height. However,

during the works, low temperatures and high winds were experienced which on occasion restricted the activities.

This approach to a difficult asset survey has shown that C2C continue to drive innovation to improve safety, reduce disruption to clients in order to achieve better quality output.

The project was completed successfully and on time, due to a team effort. Regular liaison with the site enabled both RAF Wattisham and C2C to share any concerns from an early stage and allowed all stakeholders who may be impacted by the activities, to be consulted.



C2C abseiling down Wattisham water tower

Driving at work



Did you know that throughout the UK, Aquatrine drive over 3 million miles per year delivering clean and dirty water services to the MoD. That is over 8,500 miles per day for 365 days of the year!

Driving this amount of miles makes the use of vehicles one of our key risks. All three Aquatrine Service Providers have worked closely together sharing initiatives that are being undertaken. This has resulted in the following actions being taken across the whole of Aquatrine:

- Training for all drivers including web based and behind the wheel training

- Regular communication in the form of Toolbox Talks including topics for winter driving, driving 4 x 4 vehicles and reminder of vehicle speed limits
- Driving Handbooks issued to drivers
- Initiatives to address behaviours include the issuing of free gifts such as ice scrapers, tyre tread and pressure gauges

Colleagues from across all three service providers attended the RoSPA driving courses.

- Monitoring of working and driving hours
- Regular audits undertaken of the drivers and vehicles.

The Aquatrine Service Providers continue to work together to drive down incidents, manage risks and ensure that knowledge is shared and would be pleased to discuss any of the above initiatives further.

C2C gain NICEIC accreditation for electrical services

C2C achieved NICEIC accreditation in January 2012, a key qualification and recognition for their high standards of electrical work. The maintenance team were put through their paces to show NICEIC what good quality and rigorous electrical processes they practice.

NICEIC is a leading UK electrical contracting industry body for electricians and electrical contractors, who oversee the competencies and technical ability of registered companies.

C2C's mechanical and electrical (M&E) team have been undertaking a broad range of electrical installation and testing work to

the required standard for many years. To gain this accreditation they had to go through a number of stages to prove to inspectors that they meet the standards of the NICEIC.

Nigel Baxter, Maintenance Manager at C2C gave details of just some of these stages:

- Comply with the national electrical installation safety standard BS 7671
- Hold current editions of all the British Standards and technical reference documents
- Undertake electrical installation and testing work to the correct standard
- Carry out Electricity at Work Regulations and relevant Codes of Practice
- Show that premises and instruments are appropriate for all electrical work



- Maintain accurate records of test instruments for certification and reporting purposes
- Show the company has adequate public liability insurance, quality standards and complaints procedures in place.
- Have an appropriate Health and Safety Policy and be carrying out risk assessments.
- Show that electricians are qualified and competent, and appropriately supervised.

Nigel Baxter holds the role of Principal Duty Holder and Qualified Supervisor for the NICEIC on behalf of C2C, and commented that; "gaining accreditation with NICEIC provides evidence to existing and potential clients that C2C is a reputable company with the relevant expertise."



C2C improving the water and wastewater network at RAF Uxbridge

RAF Uxbridge is home to the World War 2 bunker used by Winston Churchill, where he first used the famous phrase; “never was so much owed by so many to so few”. The Grade 1 listed bunker is located at the Uxbridge site within a 90 year old museum which contains the fully restored Operations Room.

Much of the rest of the site is the subject of a massive redevelopment programme which will provide 1,400 homes and 20,000 m² of commercial development plus a 1,200 seat cinema.

C2C successfully won the work to provide new water mains and sewers to enable part of the site to be redeveloped for housing. The project started early in 2012 and has been successfully completed.

Ian Burtenshaw, Project Manager for C2C said; “Winning this work is an example of C2C’s commitment to expanding the services



World War 2 Operations Room RAF Uxbridge

we provide and developing growth within the business. There were a number of technical challenges to overcome within the site and

the team worked with the client and other interested parties on the site to achieve project completion on time and within budget.”

Private Drains and Sewers (PDaS) Transfer

The most significant change in sewerage legislation since 1936, took effect on 1st October 2011. From this date, some 200,000km of private drains and sewers were transferred into public ownership to the water companies across England and Wales.

The legislation was introduced to remove years of confusion for home-owners over whether the ownership of underground sewers and drains lay with them or the relevant Water Company.

Within the Aquatrine contract this new legislation had the potential to cause major confusion and uncertainty for MoD estate residents, and also could have had implications affecting the operational performance of C2C – one of the Aquatrine’s water and wastewater service providers for the east of England.

A project team consisting of PMO staff and the two affected Aquatrine Service Providers (C2C and KWS for England and Wales) was set up to look at all the aspects of the change, such as:

- customer contact issues
- technical issues
- financial implications
- and the development of a suitable implementation plan

The outcome of the meetings was an agreed approach for the transfer of Private Drains and Sewers to be achieved as smoothly as possible, and the development of high level customer service processes and protocols.

Preparing for the transfer involved producing reference documents for C2C staff to use when enquiries come in and



Water Company staff clearing a blockage on a transferred sewer

training staff in the control centre and the Service Delivery teams in the field.

The transfer took place smoothly with no surprises and the training proved its worth as we have successfully transferred over 12% (128) of our sewer blockages to the Water Companies. As we start the new financial year, the PDaS process has now become business as usual and a full year is likely to see over 300 blockages resolved by the Water Companies.

C2C continue to be committed to minimising both impact and inconvenience to customers, by acting as the first response to any sewer blockage or problem, and then ensuring that each enquiry is investigated to identify the correct “owner” of that asset. This ensures that C2C continue to provide the best customer service that they can.

Interview with... Annette Shaw

Annette Shaw is a Regional Representative at Defence Infrastructure Organisation. Her territory covers South West England and Southern Wales.



Annette Shaw

● **How long have you been in your role and what did you do beforehand?**

I started my current role on 1st March 2011. Before that, since 2007, I was Assurance Manager working on measurement arrangements and sustainability.

● **Which area do you cover?**

My territory covers the South West of England from Cornwall to Hampshire and north to Gloucestershire and Powys in mid Wales.

● **How do you stay in contact with your stakeholders?**

Keeping in contact is fundamental to my

role and I do this through lots of telephone calls, emails and site visits!

● **What does your typical day entail?**

My main focus is on improving the contract implementation from everyone's perspective! This involves resolving issues about scope and clarifying responsibilities, providing assurance on what we do and encouraging people to think about how they use water.

● **What benefits do you think Aquatrine brings to customers on the ground?**

Clean water at the turn of a tap

immediately springs to mind! However, the list is almost endless.

● **What do you think are the biggest challenges on the horizon?**

For me it's to make sustainable water use an automatic part of everyone's life. Changing behaviours is very achievable over time but with the record dry weather that we are currently facing in Britain, we need everyone to use water efficiently now and not waste it.

Story Sacks for school children

Veolia Water Nevis (VWN) has had a long association with all of the MoD Barracks located in Edinburgh. Most recently VWN visited Colinton Primary School in Edinburgh whose catchment area includes the Service Family Accommodation for both Redford and Dreghorn barracks.

The school serves the Edinburgh Garrison, with the children's parents working predominately in 1 SCOTS or 3 RIFLES. These battalions are currently in a cycle of deployment in Afghanistan, with 3 RIFLES currently deploying to take part in OPERATION HERRICK 16 in Feb/March 2012.

Colinton Primary School has the highest percentage of service pupils of any school in Scotland. Naturally, the school wishes to provide the best possible support for children's emotional health and wellbeing. As part of this, they have developed Story Sacks to support the pupils at home. These sacks include a variety of books for the children to keep along with suggested activities to undertake at home. Books in the Story Sacks

include: *Deployment journal for kids, Daddy is going away, I have feelings, The huge bag of worries, and I miss you.*

Following an invitation to the 3 Rifles pre-deployment community briefing in February, Nevis General Manager, Richard Anderson donated 10 Story Sacks to Susan Imrie, the school headmistress. In thanking Veolia Water for its donation, Susan Imrie remarked "This cycle of deployment creates heightened tension in the school, due to the nature of the role these soldiers undertake in Afghanistan. These Story Sacks provide real benefits to our Service Children who may be experiencing high levels of anxiety for long periods of time. This generous donation will no doubt have a positive impact on their learning."



Richard Anderson presents Veolia's Story Sacks to Colinton Primary School Head Teacher Susan Imrie (bottom left) and parents

Revised Aquatrine Manual available on intranet

For people with access to the Defence Intranet, the Aquatrine Manual has now been updated and is located via the following file path link: <http://defenceintranet.diiweb.r.mil.uk/DefenceIntranet/Library/CivilianAndJointService/BrowseDocumentCategories/DefenceEstate/AquatrineManual.htm>