



**CWMAG CONFERENCE 2022
LOOKING BACK – LOOKING
FORWARD
10 YEARS OF CWMAG**

FIONA PAGE



*And then one day you find
ten years have got behind
you*



ME

Safe to say that 'Hydraulic Modeller' wasn't on the list of jobs from the career advisor I saw in secondary school

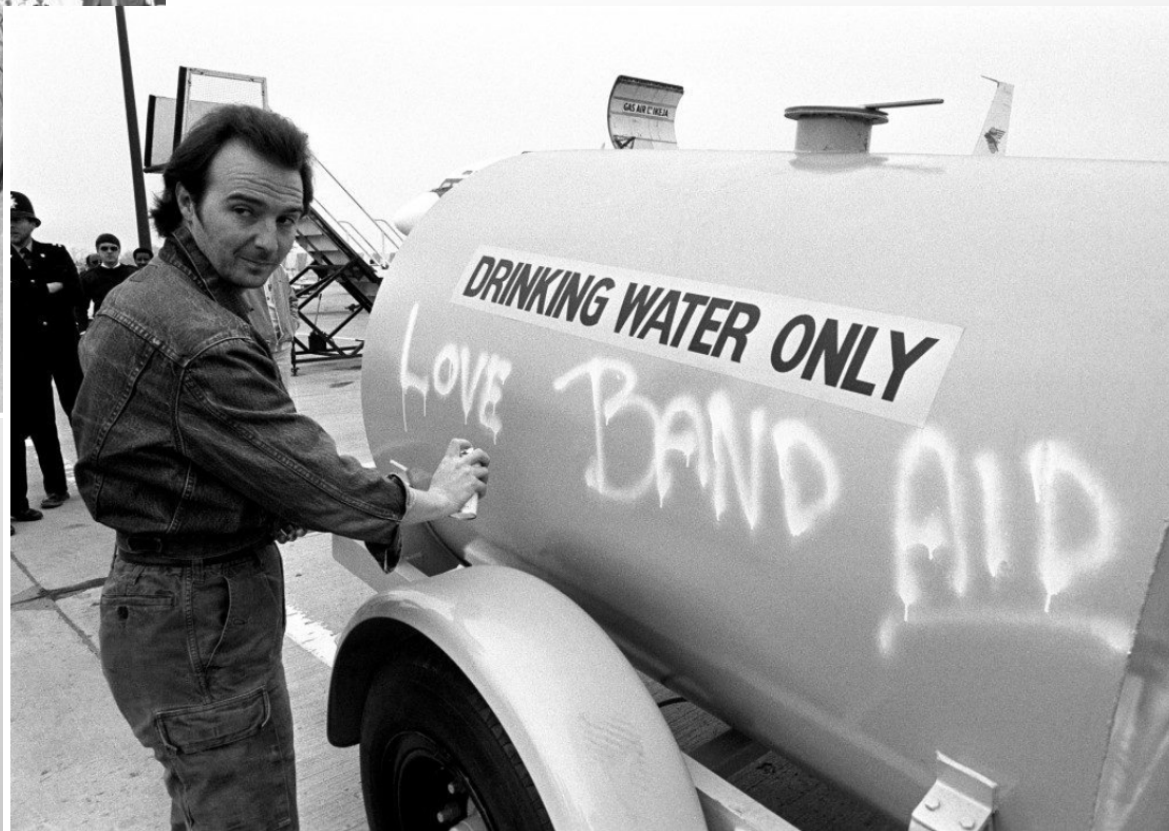
Autumn of 1984 – famine in Ethiopia, heartwrenching images on the BBC cemented a desire to help feed people.



Images of starvation prompted worldwide action and Live Aid concert



Kept alive by Bob Geldof efforts
with Live Aid





MORE ME

Thus I went to Leeds University and graduated with a degree in Agricultural Science.

Worked for a number of different companies:

Haiste – bought by Carl Bro – then Grontmij – now Sweco

Babcock Water Engineering Ltd – bought by Earth Tech Engineering – now Aecom

Mouchel (had recently bought Parkman & Ewan Associates) – acquired by WSP



LESSON #1

Be nice – you never know when you'll work with people again. It's a very small world.





YORKSHIRE WATER 2010

I joined Yorkshire Water in 2010, following a long period where there were no clean water modellers in the business. YW had relied on external consultants only, so the task was to bring it back under YW control and re-direct it.

Where do you start with just 2 people?



CWMAG 2011

cwmag

clean water
modelling advisory group





CWMAG

We based ourselves loosely on the Urban Drainage Group format and formulated our aims:

Educate and inform on aspects of Model Build and use

Derive and develop some standard user guides

Research topics that would improve the build and use of models

Hold an annual conference or two



Autumn Conference 2014
'Planning and Operation - AMP6 The Future is Now'
23rd & 24th October 2014





Despite my initial horror, I've thoroughly enjoyed being part of the group, there's tremendous advantages to networking and working collaboratively. Met some great people and had a lot of support. Faced the fear of public speaking. Had to think on my feet and wing it

LESSON #2

The moral of the story – when pushed – jump. It might turn out ok

Or as that boss of mine Pete used to say JFDI



YOR

Climate > News

Drought declared in Yorkshire for first time in four years as millions face water restrictions

Downpours forecast will 'not be enough to correct weeks of dry weather', local Environment Agency official says

Zoe Tidman • Tuesday 16 August 2022 12:56 • 5 Comments



Been an interesting summer so far



Worth Valley: Temporary pipe to top up drought-hit reservoirs

15 September



YORKSHIRE WATER 1995

At a weekly media conference staged by Yorkshire Water at its headquarters in Leeds, chief executive Trevor Newton announced that, in the interests of saving water, he had not had a bath or shower for three months. The journalists sitting at the table leaned away from him.

He staged a televised demonstration in his bathroom at home showing how to have a “good wash” using half a basin of water.

Then it emerged that he had relatives in the north-east, which had plentiful supplies of water, and was nipping up there regularly for a nice soak in the bath.

A gift from the people of Ethiopia.....

Mark Thomas Comedy TV (1996) Series 1 Episode 4

<https://www.youtube.com/watch?v=0D-CLGtJXOE&list=PLF01F9D8DAFF26D2F&index=4>

About 10mins in

News

Yorkshire taps to run dry in a week

Nick Schoon • Sunday 12 November 1995 00:02 • [Comments](#)

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YORKSHIRE is facing the worst British water crisis this century, with cut-offs affecting 600,000 people due to start in a week.

Yet it need not have happened. As an emergency tanker fleet is poised to start bringing in water from outside the Yorkshire Water region, a Government-commissioned report shows that the company has yet to exploit a huge water source on its own doorstep.

St Aidan's Pit, a vast, flooded open-cast coal mine five miles from Leeds,

The company told the worst-threatened communities, Bradford and Halifax, that it was to install standpipes in the streets. It said there would be day-on day-off water disconnections.

It installed a token standpipe in one Bradford street to demonstrate the system.

Then an irate pensioner ran from her home and told a quivering public relations man that if her water went off she would “stick the standpipe up your arse” — her words. It was on TV that night.

CLIMATE CHANGE

Harvey Bradshaw Chairman of the National Drought Group:

His colleague Mr Bradshaw told BBC Radio 4: "We have enough water for public supply but as you run into ever drier conditions you take more serious actions to conserve the water you have and we are on that process now.

"We have got an exceptional set of circumstances which has led to this drought and we've all got a responsibility to play out now, including and principally the water companies.

"We expect water companies to bear down on leaks, we expect water companies to put in more pipes to connect their network."

He said that firms needed to move "faster and harder", adding that the Environment Agency, the regulator Ofwat, and the Drinking Water Inspectorate had formed an alliance encouraging them to come forward with plans for necessary infrastructure improvements.

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18_headline_findings_v4_aug22.pdf

Despite overall summer drying trends in the future, new data from UKCP Local (2.2km) suggests future increases in the intensity of heavy summer rainfall events. These increases in UKCP Local (2.2km) are typically greater than those in the Regional (12 km). For urban areas particularly, this will impact on the frequency and severity of surface water flooding.

3.2.5

Future climate change is projected to bring about a change in the seasonality of extremes. UKCP Local (2.2km) projects an extension of the convective season from summer into autumn, with significant increases in heavy hourly rainfall intensity in the autumn.

3.2.6

UKCP Local (2.2km) suggests significant increases in hourly precipitation extremes in the future.

For example, rainfall associated with an event that occurs typically once every 2 years increases by 29% (central estimate). This has several implications for how we manage water. It is worth noting that whilst the intensity of hourly rainfall is projected to increase in the future, overall summers are projected to become drier.

3.2.7

As an example of using the UKCP18 products together we highlight the change in average winter precipitation. The different sets of simulations and the probabilistic projections all show an increase.

However, the increase projected by the Local (2.2km) simulations is greater than in the Regional (12km)




SINCE 1995....

Extended our existing GRID system

Emergency pumping Stations and Pipelines

Enable water to be transferred from East (boreholes) to west
(rivers and reservoirs)

Leakage reduction (50%)






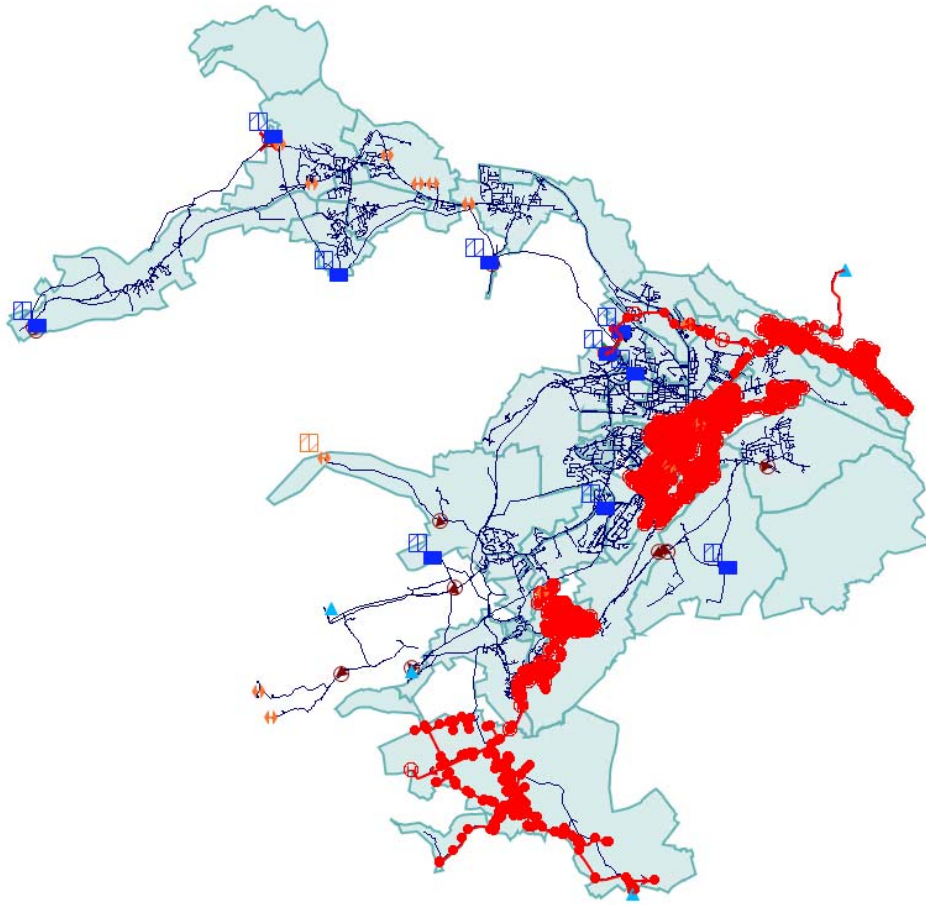
LOOKING FORWARD

We're going to have to do more, in an ever increasingly difficult financial situation

We're going to have to react quicker, plan better



WHERE I LIVE...MODEL 2022



What's been important? Modelling various scenarios, both long term plans and short term emergency solutions (such as pumping and re-zoning).

Collaborative working across teams

TO SUMMARISE....

#1 Be nice – It's a very small world.



#2 when pushed – take a leap and jump

#3 BUT MOST OF ALL.....

What we do is valuable & important and we should be proud of it

