The Scope of the Initiative.

I began to perceive the link between water conservation and social employment a few years ago. I started to imagine, applying my own practical experience, what it would be like, if we were to witness a national plan implementing a water conservation programme - the proof that the work is actually being carried out at scale.

I have been approached by the Net Zero Leadership team:

www.northoftyne-ca.gov.uk

www.netzeronortheastengland.co.uk

They are interested in sponsoring a proposal intended for submission to the current unitary mayor and future North East Mayoral Combined Authority (NEMCA). These new devolved power sharing, regional net zero centres, might offer fresh hope for action concerning new social employment in the future.

The initiative has also attracted the attention of the North East Universities consortium In-TUNE, lead by the University of Durham, head of business and impact, alongside their policy and social impact teams.

The Vision

I hope the introduction to my research will prove insightful and visionary. My purpose is to galvanise commitment in support for the largest Social Enterprise ever created in Western Europe and in pursuit of a National Water Conservation Programme, aimed at improving the lives of thousands of people through quality of employment and occupational health, (Ref; Journal entry page 3 point 8, 'Build Back Better'). Climate Emergency requires big thinking. Water conservation offers a largely untapped resource to exploit.

The Proposal for a National Water Conservation Target.

Energy is consumed to pump a tonne of water, more to treat it and more to heat it.

The largest industrial energy consumers in the country in many regions are the water companies.

The biggest water wasters are industrial and commercial (I&C) consumers.

- The exercise to reduce water consumed annually by 1 billion metric tonnes, (My Ref; Journal P. 2 point 4).
- Measure sufficient water offset, adding capacity to cover the building of, and annual water usage for over 4 million new homes, (My Ref; Journal P. 3 point 9).
- Avoid the construction of new reservoirs and ever greater river water abstraction by achieving significant reductions via the combination of water wastage and efficiency savings.
- Significantly reduce the amount of effluent the water companies treat, measure 750,000 metric tonnes reductions.
- Begin the task of reducing daily national water consumption per capita from what must soon become 150 litres.

Conservation Programme Objectives.

- The project should be completed within 10 years and include all 125K public use buildings, (My Ref; Journal P. 2 point 6).
- The conservation programme will <u>not</u> require funding from the central government, any local public sector agencies or water companies, (My Ref: P. 3 point 8).

Communities Target.

- Create 35K new community enterprise water conservation jobs with transferable skills to the construction sector.
- Improve representation for the welfare needs of employees, personal and family debt management, occupational health and action for change with major financial institutions.
- Deliver new water conservation research, study & training programmes, (My Ref; P. 4 point 10).
- Support new commercial services and new products applications, (My Ref: P 4 point 11).
- Combine business development opportunities for local companies.

The scale of the challenge.

- I am pressing leaders to recognise the scale of the task we face concerning water conservation. I calculate a figure of 1 billion metric tonnes annual reductions is possible this tests me to the limits of my knowledge.
- The exercise would need thousands of people employed to achieve, millions of people hours, and take years to complete.
- Tackling industrial water savings, requires an industrial response, which means it would probably require between 8 - 12 centres of excellence, (Amazon warehouse sized units), strategically placed around the country. The project wouldn't be without significant, negative environmental impact, but herein lies the proof that the work is actually being done.
- Reducing annual water consumption by 1 billion tonnes will only provide around 13.5 litres, future per capita savings, against government policy for national savings of 50 litres savings per head per day. But there remains no meaningful plan to achieve this.
- I conclude it is up to the community to shape policy, to build the systems, processes & procedures to carry out this work, and that we won't require funding from central government, public agencies, water companies or local authorities to do it.
- I lobby to get decision makers to recognise the scale of the challenge, because the cracks are beginning to show we are starting to run out.
- I take the view that Climate Emergency requires big thinking, not simply magic bullets, and Net Zero leadership teams and universities must begin the task of contributing to the complex business plan needed to tackle this issue.
- There are 1.4 million industrial processes consuming water everyday in England alone, and a lot of money tied up in water usage that we can exploit.
- The question I pose is how we should use this cash to create social employment, future centres of excellence, and a successful strategy to make sure industrial and commercial (I&C) consumers are engaged in readiness they need to play their part.

The waste of lives and public money.

- I am a witness to the lost generation on subjects of water sustainability, the attainment of national water conservation targets and social justice - the gap between rich and poor grows wider.
- I read Parliamentary Scrutiny Committee findings (2019), describing £12 billion invested in Local Enterprise Partnerships that was meant to create new employment, but showed no evidence of any new jobs that wouldn't have been created anyway. I wonder if that's also the case in Wales?
- I see data highlighting the drop out rates for apprenticeships is now nearly 50% and over 7.2 million of our national workforce employed on the minimum wage or in the gig economy.
- Industrial water conservation could tackle these issues, if people are given the chance to
 actually run the operations, through their own enterprise, and will make an outstanding
 contribution to the national policy on water sustainability. This is not as difficult as it might
 sound.
- It remains only a hugely ambitious proposal....

My response to The Centre for Climate and Social Transformations (CAST) and CCC commissioned report: Implications of Behavioural Science for Effective Climate Policy.

- Until such time as the Climate Committee and government comprehends the scale of the challenge and applies measurable, economic value for human life, no significant behavioural changes will take place.
- Millions of people will never regard a future age of nature as theirs to own.
- Water conservation offers a beacon of hope for change and should have been included in the behavioural impact paper.

What's going to happen if we don't conserve enough water in the future?

- We need more water, you estimate 1.46 billion metric tonnes a year, about the same as the entire Thames river basin and tributaries. You're not sure where we will discover new sources to meet demand, this figure doesn't take into account effectively the net migration in population growth.
- Water companies want £96 billion to cover costs for increased storage, abstraction and effluent treatment capacity. Their estimates aren't enough, they'll demand more investment in the future. Virtually none of this money will be used for the purposes of water conservation.
- Household water bills will now rise year on year, for the next decade, at the fastest rate since the invention of the water meter and the great sanitation projects of the Victorian era laid down our industrial water supplies system. The gap between rich and poor will grow wider.
- We need millions of new homes. Housing developers are facing challenges obtaining
 planning permission. Peak Water, water neutrality zones are spreading. Government
 relaxation of pollution laws won't make the difference there's simply not enough water to
 go around.
- Thames water is investigating large-scale abstraction from Powys those rivers are already over-abstracted. More schemes like this one will appear in the future. Wales is being targeted.

The better way.

- The community maintains a position on the executive board for every water company in the country.
- There are sufficient water savings in the built environment, for domestic, industrial and commercial (I&C) consumers, to cover the annual water use for every new home we need to build until 2050.
- There are enough water savings to be able to cap every new homeowner's water bill for the next 10 years, including every local school, care home and hospital. It's not going to need funding from the public sector, water companies, or property developers to do this.
- There is enough money tied up in water conservation for us to exploit, to avoid the construction of reservoirs and ever greater river water abstraction.
- If we keep expanding our infrastructure, without conserving what we have, one drought in sequence, and one day, we will run out.