Earlier this month, Mami Mizutori, the UN secretary general’s special representative for disaster risk reduction, said:

“Drought is on the verge of becoming the next pandemic and there is no vaccine to cure it. Most of the world will be living with water stress in the next few years. Demand will outstrip supply during certain periods.”

It is self-evident that it is impossible to extract more fresh water than there is fresh water available.

But, the margins are getting tighter around the world.

The Global Commission on Adaptation’s report “State and Trends in Adaptation 2020” said:

“Globally, 23 countries have water stress levels above 70 percent, of which 12 are in the Middle East and North Africa region. A review of Sustainable Development Goal reporting shows this situation is not improving.

“Furthermore, 60 percent of the 172 countries reporting are unlikely to reach the target of integrated water-resources management by 2030. Without fundamental progress, it will not be possible for the various stakeholders who are co-dependent on the water resources in a country to adapt to a rapidly-changing climate.”

The maintenance of people’s well-being, and social order, are closely tied to water quantity and quality.

Water Aid point out that even washing our hands, something we take for granted as a first line of defence against disease, is a luxury that billions of people can’t afford.

The implications of this transcend national boundaries as many countries share water resources.

Whatever ignites the mass migrations and conflicts of this century, they will be lit on the tinderbox of nature in drought.

By 2050, the number of people who lack sufficient water at least one month per year, could soar from 3.6 billion, to more than 5 billion.

Southern Madagascar is currently experiencing its worst drought in four decades with more than 1.14 million people food insecure. Of those, an estimated 14,000 people are already in catastrophic conditions.

The head of the UN’s World Food Programme, David Beasley, has said that while this area of the world has contributed nothing to climate change, they are “paying the highest price”.

Water should be as much a part of international climate discussions as carbon emissions and net zero.

Water security needs to be central to all decisions made on planning, development, and investment around the world.

This is one of the reasons I have called for industrialised nations to deliver the $100 billion in climate aid they promised to developing countries in 2009.

Despite world-leaders repeating this commitment in the 12 years since - most recently at the G7 - there is still no certainty when it will come.

This diminishes our relationship with countries on the frontline of water scarcity.

It is also against our national self-interest, because how those countries deal with new extremes is an experience we need to learn from, and will increasingly pay for.

Last week, the Committee on Climate Change released a report on how well this country is preparing.

In that it said that by 2050, it expected:

“Drier and hotter summers. Average summer temperatures are projected to increase by 1.5 degrees Celsius and rainfall decrease by 10 percent.”

The Committee noted that we have well-developed policies in place to manage water scarcity, but we are not comfortably prepared for what is coming.

As chair of the Environment Agency I agree.

Water companies recently published updated drought plans that show how they plan to maintain water supplies and protect the environment.

We have reviewed these and the initial findings are that water companies generally have improved but there is still more work to do.

England’s water is not as secure as people believe.

In 2020, the Environment Agency published a National Framework for Water Resources.

It showed that if we continue to operate as usual, by 2050:

• the amount of water available in England could be reduced by 10 to 15 percent,

• some rivers could have between 50 and 80 percent less water during the summer,

• and, we will not be able to meet the demands of people, industry and agriculture.

This means higher drought risk, caused by the hotter drier summers, and less predictable rainfall.

The National Framework for Water Resources says that if significant action is not prioritised, then by 2050, around 3,435 million extra litres of water per day will be needed to address future pressures.

This includes 1,040 million litres per day to supply the growing population alone.

Parts of England are over-abstracted, and we are already making hard choices.

For instance, last week’s proposed changes to water abstraction licences held by 20 businesses in the Ant Valley on the North Norfolk Broads.

England’s water and sewerage companies coped well with the coronavirus pandemic, but recent research indicates that overall demand increased by about 2.6 percent between February and October 2020.

Business use decreased, and central London saw a reduction, but home use increased.

The heatwave in Sussex last August, illustrates the challenge this presents.

Commuters to London were staying at home, and few people were going on foreign holidays, so the usual 10 percent drop in demand from July to September, didn’t happen.

Thousands of South East Water’s customers found themselves without tap water.

A growing population’s thirst in increasingly frequent heatwaves is a now an operational challenge for UK plc.

We expect water companies to review how resilient their distribution networks are to more extreme weather to ensure they can keep tap water flowing.

Water companies also need to reduce the amount of water leaking from pipes, and help their customers to save water.

Everyone needs to reduce the amount of water they use, at home and at work.

The National Framework for Water Resources also sets out a greater level of ambition for restoring, protecting and improving the environment.

Environmental resilience and protection should be on an equal footing as water companies’ customers’ needs and social health.

Yesterday, you heard from Paul Hickey from RAPID talking about the five Regional Groups tasked with developing Regional Plans.

Among other things, these plans aim to:

Secure long term reductions in water use to 110 litres per person, per day.

And,

Reduce leakage by 50 percent by 2050.

Over the next five years, the water industry faces difficult decisions about how water will be allocated, valued and funded.

This is not a speech about who pays for what, but we do need more private investors to explore the economic opportunity in improvements to the natural world.

Without this we are too reliant on government interventions.

Right now, government proposals to reform water abstraction and improve water management are necessary if we are to balance the needs of people and the natural environment.

The Environment Agency is in the process of determining applications under the New Authorisations programme, bringing previously exempt abstraction activities into regulation.

The first 350 of these were issued at the end of March with 1000 more to be determined by the end of 2022.

By bringing these activities such as trickle irrigation into regulation, we can ensure the environment is protected and the rights of abstractors are protected.

But, if we don’t take these strategic decisions now we will have failed future generations and destroyed the future environment.

Integrated water management is vital.

That’s why the Government’s £150 million flood innovation programme is allowing the Environment Agency to put 25 new ideas to the test that help protect against flood and improve water security.

For example, one project in Suffolk and Norfolk aims to capture surface water runoff during periods of flood and high rainfall, and reusing water for groundwater recharge and agriculture.  
In May, Ofwat the UK economic regulator, announced that the water sector plans to invest £2.7 billion in environmental projects.

This follows a joint letter to water companies from Defra, the Environment Agency, Ofwat, the Drinking Water Inspectorate, and the Consumer Council for Water, calling for greater support for a green recovery.

As part of this new package of investment, companies will commit over £157 million to help eliminate harm caused by storm sewage overflows – which are being used with increasing regularity…

…and trial the creation of two new bathing rivers.

It demonstrates a renewed commitment to reduce pollution incidents and make the country more climate resilient.

As I speak, water resources across England are currently healthy as a result of the wet winter period and a wet month in May.

While the outlook for July is for a return to warmer and drier conditions, we should not need drought management actions this summer.

However there are still risks with extreme weather, especially heatwaves.

Ensuring clean and plentiful water is a job for everyone.

Everyone uses water, so the industry needs to thinking about people and communities, not customers.

Everyone at this conference should see themselves as an environmental ambassador at home and at work.

As the water sector in England joins leaders around the world in committing to ambitious net zero targets, we need to see these delivered in a way that enhances water security in a changing environment – taking part in the race to resilience.

If we demonstrate that we are doing both, then the climate leadership we wish to exhibit at COP26 and beyond will be evidenced by a healthy natural water environment in the UK.

These are global challenges.

But, how we act at home matters.

Thank you very much.