

# Climate change and policy: opening the floodgates of opportunity?

As 2019 begins, many of us feel tentative about which direction the coming year will take. For those concerned about the impacts of climate change, the end of 2018 was characterised by urgent calls from the Intergovernmental Panel on Climate Change (IPCC), [tension-filled discussions at the COP24 in Katowice](#), and [climate change protesters globally](#) call to their governments for quicker action. The special report released by the IPCC [concluded that we have between 3-10 years before our carbon budget for sub 1.5 degree warming is expended, and 12 years to change consumption habits entirely](#). The struggles required to achieve this reversal logistically, let alone politically, are perplexing, but the key takeaway is that climate change effects are already existent, and forecasted to worsen, even with the ambitious target of 1.5 degrees.

Despite international climate summits, criticism of current [\(in\)action by governments to mitigate the effects of dangerous climate change](#) requires a start in adapting to the consequences that lurk around the corner. A [tool by the Carbon Brief](#) has taken the findings of the IPCC report, and compares effects from 1.5 and 2 degree projections. An overview of impacts affecting mid-europe are: increase in hot days, decrease in winter frost, increase in average and extreme rainfall, increase in wildfires, increase in water scarce populations and an increase in economic damage from flooding of up to 1288%.

So what might this mean for our relationship with water? We can expect more of it, appearing more frequently, but also longer durations where there is no precipitation, which makes storage vital for every flood. Since the occurrence of wildfires is set to increase, access to water will become more important for controlling them.

So far, one might say that this has been a pretty disheartening read, however, what motivates me to undertake climate change related research is the belief that inevitable systemic change can lead us to a more fair and empowered future. My research looks at climate justice and flooding in the UK, prompted by a desire to understand the relationship whereby vulnerable citizens are the most at-risk of being flooded. The impacts of flooding don't stop with a rainfall event; after being flooded, the most vulnerable citizens are also less likely to be insured (ability to restore houses and belongings), are more susceptible to develop mental and physical health issues, and are less likely to maintain job stability throughout the experience. For more information, the [Joseph Rowntree Foundation has a wealth of research around flood vulnerability](#). Nevertheless, the current situation can be improved, and that's where policy has a role to play. Policy related to flooding can influence wider areas of society, and start building a future free from climate change.

We need to get better at 'living with water' - which means making space for water where it enters our lives, and can be achieved through integrated urban planning which considers climate at the base of it's philosophy. Future flood prevention, reduction and recovery plans need to be comprehensive and holistic. This could include, for example, bans on building on floodplains, rainwater storage containers on new and retrofitted houses, awareness of river basin geography: upstream neighbourhoods taking measures to reduce downstream impact, and uptake and implementation of blue-green infrastructure. While some of these methods draw inspiration from how humans and nature lived alongside in the past, they do not represent a backward step; in fact they hold a positive vision for the future.

The implications that centering water in our planning has for European policy are broad and applicable for both retrofitting and future design. People have historically settled around freshwater sources because of our vital reliance on it. Of course, we must keep water close, but learn to live alongside it more harmoniously. Blue-green infrastructure is an example that facilitates synergy across several policy areas: urban drainage and flood reduction are the two obvious advantages, but [research](#)

[suggests that additional benefits](#) include increased biodiversity, air and noise pollution reduction, reduction in energy and financial costs, health benefits and increase in amenity and recreation. In addition to this, we need to shift attitudes: educational policy needs to nurture a new approach to how we treat water, and evolve us from being customers to valuing water as a substance with the power to maintain or end life.

Climate change is unique in the challenges that it presents and will be a pivotal event in human history. From a policy standpoint, this threat to our future holds an opportunity to rewrite more than water management, and has potential to be a building block towards a future beyond climate change.

by Juliet de Little