

INUNDATION

By November 2013 the Intergovernmental Panel on Climate Change (IPCC) representing 195 countries, could announce the 95-100% probability that human action was the dominant factor in producing the global warming observed 'on all continents and across the oceans'.

In March 2014 the IPCC working group on 'Impacts, Adaption and Vulnerability' reported negative impacts on crop yields, vulnerability of both ecosystems and human systems, and high confidence that 'increasing magnitudes of warming increase the likelihood of severe, pervasive and irreversible impacts'.

So human beings clearly now have the 'power over nature' they have long desired! We genuinely and 'collectively' have agency over our destiny; the story unfolding is that we can, and are making the weather radically more extreme.

The IPCC's strenuously researched projections offer versions of a future that are most likely to include intolerable physical transformations, it will rain, so torrentially as to drown whole nations, whilst in others locations, the rain will fail to arrive, those that wait in vain will starve, or migrate, with our without dignity.

"We have arrived, in the twenty-first century, at a critical juncture in the story of weather. Unless decisive action is taken very soon, the next generation will see the last of the weather we know. We will have written our ending to the history of life in a temperate climate which has endured for about 11,500 years. Whatever the future holds, we are at a point of divergence. Either there will be substantial changes in the way we live, or there will be substantial changes in the climate – which will in turn necessitate new ways of life. Things will not stay the same; we will never again stand in the same relation to our weather."

Alexandra Harris, 'Writers and Artists under English Skies'.

GREENHOUSE GALLERY

13th May - 12th June

www.Greenhousetrust.co.uk
42-46 Bethel St. Norwich

*A change in the weather is sufficient to
recreate the world and ourselves anew*

INUNDATION

CLIMATE CHANGE CHALLENGE EXHIBITION

Juha Agren
Vanna Bartlett
Erica Best
John Blake
Kerry Buck
Sarah Caputo
Dot Cobley
Asya Geffer
Evie Janssens
Tish Kerkham
Martin Langford
Liz McGowan, Jessica Perry, Antonia Soto
Rory McShane
Robert Nairn
Hannalore Lucie-Smith
Heather Tamplin
Tigger
Heather Tilley
Julia Webb
Doreen Wells
Lynn Woollacott
Mark Yardley

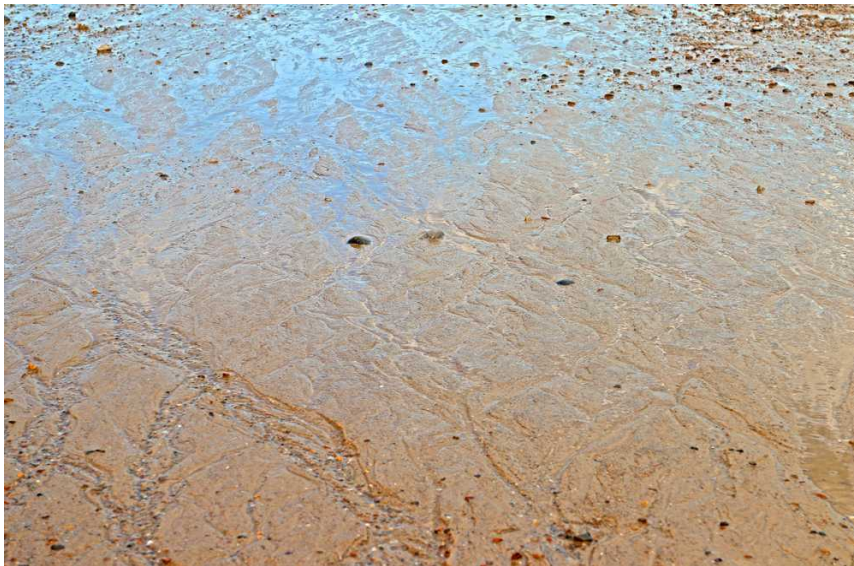


THE CLIMATE CHANGE CHALLENGE

Launched in December 2015, at the start of the Greenhouse Trust's third Environmental Art Fair, the **INUNDATION** open submission briefing invited artists and writers to respond to a range of interconnected climate change facts and issues, including:

- In 2015, global temperatures will be more than one degree warmer than pre-industrial levels for the first time.
- The past decade has been the hottest since temperature records began. Increasingly extreme temperature and weather incidents will change the way we live.
- The coastal areas of Europe and the UK, particularly East Anglia and the South East, have been identified as areas at increasing risk of sea level rise. What might the abandonment of Norfolk's arable land involve, or even cost? Can regions be depopulated in an orderly fashion? Who is going to take that decision publicly and who will enforce such a command? When and where will coastal defences be abandoned and the sea allowed in?
- How will Norwich cope with refugees from Yarmouth and Lowestoft as well as other parts of the world?

- As sea levels rise and climate change leads to more storm events, we will see more and more inland flooding of the sort seen in 2013-14, with higher peak levels and greater frequency.
- Floodplains and wetlands, such as East Anglia's fens, can provide natural sinks for flood waters, taking the force out of the water, settling sediment and protecting towns and agricultural land. However, 42% of floodplains in the UK are separated from their rivers and most of our wetlands are drained
- Oceans cover more than 70% of the planet's surface. The greatest focus has been on the temperature of the thin layer of air that we live in, but this is only one of the indicators of warming; the oceans are another. 94% Of the heat energy gained by the planet since 1991 has ended up in the oceans, with another 4% absorbed by the land and ice.
- The Pacific's depths have warmed 15 times as fast during the last 60 years than at any time in the previous 10,000 years.
- The International Panel on Climate Change (IPCC) is resolutely clear that hundreds of millions of people will be displaced by the end of this century. Global warming will place humanity under unprecedented strain, generating mass migration, violent conflict and misery the world over.
- As the temperature rises and the weather becomes ever more



extreme, the wars being fought over finite resources such as oil, gas, coal, water, precious minerals and food will intensify.

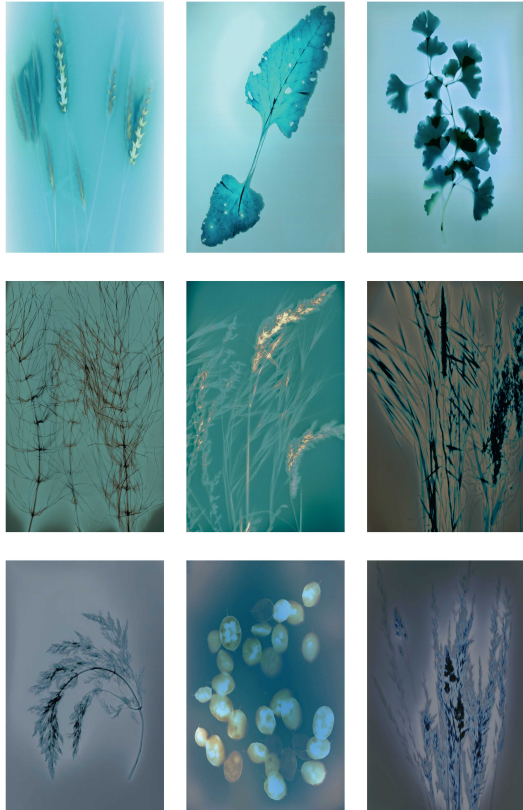
- Climate change will lead to increased ill-health in many regions, examples include: a greater likelihood of injury, disease and death due to more intense heat-waves and fires; an increased likelihood of under-nutrition; and increased risks from food and water-borne diseases.
- The UK's existing air pollution is likely to worsen as burning fossil fuels increase ozone levels and warmer weather increases the incidence of asthma and hay-fever.

Juha Agren – Low Tide

My pictures are a representation of the sea water conquering space, digging in deeper into soil.



Low Tide - II



Erika Best – The Lament

It is the Anthropocene Era. As well as our homes, our land is flooding with increasing regularity.

Fragments of plants float in a watery lagoon, which is both beautiful and terrible. Some are resting in a still pool, detached from their anchoring roots and at the mercy of nature's forces, whilst others yet cling to the soil, still holding the land in place. All may soon be swept away by a new torrent, perhaps eventually even finding their way into a plastic-filled sea. They are drowning, and their mothers will drown also.

Food plants wheat and beet, ginkgo a rare survivor from a distant era, horsetail a pernicious weed, fennel a graceful wild herb beloved of pollinating insects, the myriad minded grasses and honesty, a garden and artists' favourite.

The floodwater does not discriminate.

The Song of Spring

The nine images are also a celebration. Of Colour. Of shape and form. Of common plants.

The everyday is as beautiful as the exotic.

Dot Cobley – Drift



drift, noun –

1 slow movement or deviation; continental drift, population migration; continuous erosion, deposition, shift.

2 the meaning, the undertow of words, declarations, promises; how they reflect, refract, the ripples that they make (*catch the drift*).

drift, verb – to meander off course, lose your bearings, your integrity; to float passively, aimlessly.

adjective – **adrift.**

Dot Cobley - Living on the Edge

December, 2013. A picture in the local paper
puts me on Happisburgh beach, post-surge,
standing at the foot of the cliff, looking up.
Clouds scuttle past unconcerned
but I'm rooted there, my neck – and my heart –
aching to grasp the logic
of this glass-bottomed house, gutted,
leaning into thin air
like a fledgling fulmar
anxious to launch from its nesting ledge.
One nudge from a careless passing cloud
would send it tumbling
to join the brokenness at my feet,
unless it opened its wings, its faith, and flew.

Bryony, left homeless, frowns for the photographer
and tells how it's exciting, at the age of sixty-eight,
to have this chance to take a new direction,
and how she means to salvage
that unusual forked chimney-pot
and give it to a friend who helped her out.

I recognise a glitter at the core of her,
flinty and persistent as the pebbles
rolling and chuckling like dice
in the waves around me.



Asya Gefter - Dialogue between land and sea. Norfolk coast

The tide comes in and changes the border of the land. While we humans have no control over the elements (as with the incoming tide in the story of King Canute), we can learn to communicate with each other better in order to accept what we cannot change and push forward where we can improve the status quo.



Asya Gefter - The tide comes in and changes the border of the land. Norfolk coast



Heather Tamplin - Radiate

With the predicted rise in sea levels due to Global Warming and increasing instances of extreme weather, it is a small step to imagine an environmental catastrophe like Fukushima's 3 core nuclear melt down happening on our doorstep.

No mention made of plans to protect these nuclear facilities from inundation due to extreme weather events. With the best scientists and computer software working on climate change - it is just intelligent guesswork as to how the global climate will change, I believe it will be out of control much earlier than any scientist has yet predicted. Like as a stone rolling down a hill gathers momentum, changes in the climate of our world will speed up and we will not be able to cope with the devastation left by one extreme event after another.

Fukushima is spewing 400 tons of radioactive groundwater daily into the Pacific, and has since 2011, 5 years and still counting the Becquerels We could significantly reduce the toxic legacy nuclear power leaves our descendants if the projected £18-24 billion were spent on renewables like wind, solar and wave



Heather Tilley – Toxic Planet

'INUNDATION' attracted me as I've worked on the theme of 'climate change' before, and I chose to depict a sectional view of the planet, with a toxic orange sky, dying trees, layers of collapsed buildings to represent destroyed civilisations, with bodies of the unborn below. Toxic smoke clouds and gaseous liquid fountains occupy the core, and alien species like the giant crayfish invaders replace more familiar life forms. Rather than a colour palette of bleak neutrals I chose to use an alien palette for an unreal but menacing effect.



Evie Janssens – The Secret Life

The piece 'The Secret Life' started out as a direct response to the brief of inundation. I was thinking that when I feel completely overwhelmed I find getting outside and being among nature a very helpful remedy. The piece took on a mind of it's own and went down a more surreal path, but I feel it is still conveying my original thoughts.

Tish Kerkham - The Wettest Year On Record

Wakened pre-dawn by the caterwauling
of domesticated moggies out on the
inches thin scrim of cement and asphalt,
listening for the bark of a fox;

remembering owls' hoots and howling dogs,
and the persistent shoots that force themselves
through city pavements, and seeds
that germinate on garage roofs,

and the westerly winds ruffling the Somerset levels,
sandbagged pubs,
and collapsed cliffs
sliding the pastel pink bungalow onto the beach,

and the footprints of the family
before the last ice age
crossing the land bridge at Happisburgh
patterning the clay.

Somewhere on the edges of sleep
a word struggles to emerge.
Later in the full light of day
it comes to me – it's hubris.



Liz McGowan - Jessica Perry - Antonia Soto
Photograph of Installation – Brancaster Beach

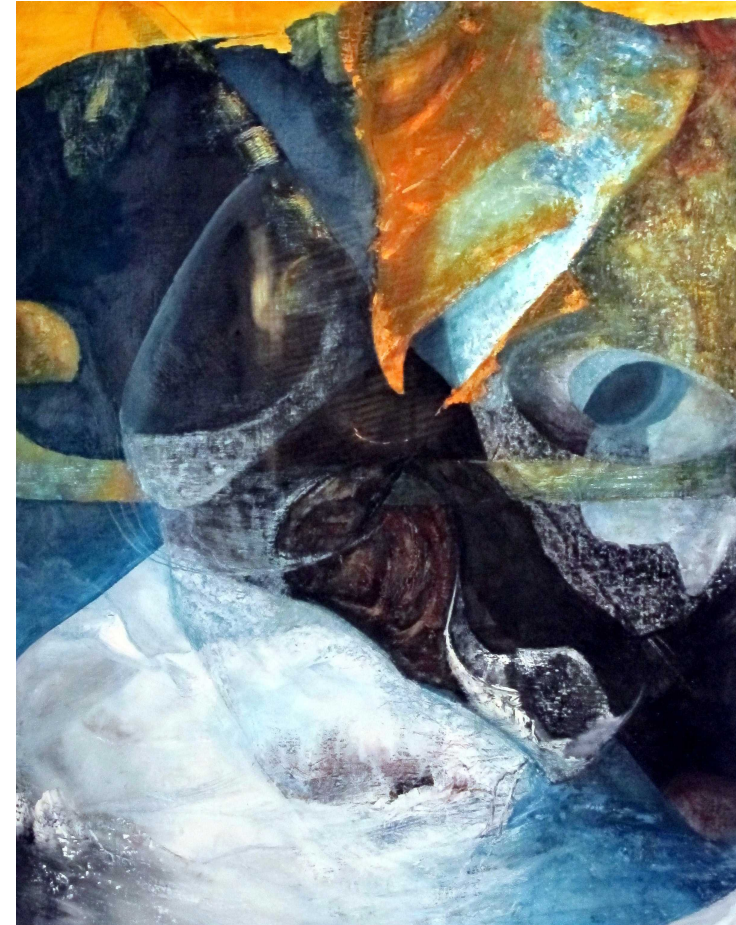
Created to celebrate the National Trust's joining of the UK Climate Coalition on Valentines Day 2016.

The sea is in our blood. Most of our evolution was spent in it. If we lick a cut it still tastes of salt. We too are pulled by the moon.

This piece expresses a love for the processes that sustain us - the constant ebb and flow of the natural world into ourselves. In it the sea becomes the blood of the heart.

But there is also a note of warning, the incoming tide first fills the heart, then overwhelms it. If we carry on exploiting her, nature will take us back into our original salty element.

We will undergo a sea-change that won't be of our choosing.



Robert Nairn - Exposure

Beyond a dark horizon, searing heat advances upon Polar Regions; ice becomes rising water, and the remaining Earth's crust is distorted and charred; survival is now our preoccupation.

Julia Webb – Self-portrait – Waiting for the Flood

this is what they said would happen

this is the sea rising X cm every year
this is the rain raining for days

this is me on the beach at Happisburgh
picking up a piece of someone's fireplace

this is me always making sure
I live at the top of a hill

this is what they say will never happen

this is 1984
when we read the predictions

this is my friend who lives
at the highest spot in Norfolk

this is the mark on the wall
where the floods have reached before

this is what they said would happen

this is me with my heating off in January
this is the rain that is more than we're used to

this is miles of countryside underwater
this is a storm with a human name

this is what they say will never happen

these are the goalposts that keep moving

these are the statistics that keep changing

these are the freshwater marshes
flooded with sea water

this is the coast getting eaten in giant bites
this is me living at the top of a hill

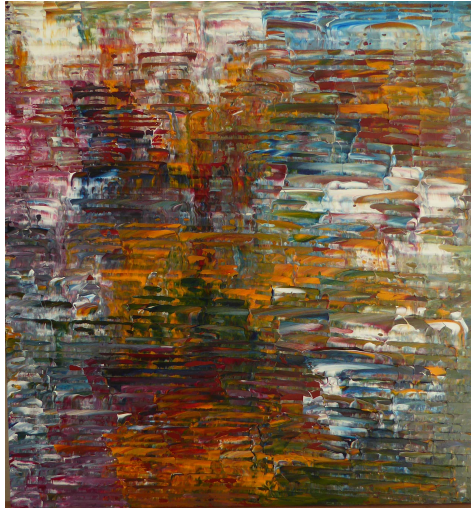
this is what they said would happen

this is the sea rampaging down the high street
this is its fingers reaching under our doors

this is me dreaming about the ark
this is me living at the top of a hill



Tigger – Arctic Tern – Climate Refugee



Dorreen Wells - Submerged

I want people to visualise what inundation means to those who were affected by the devastating floods in Cumbria and the North of England in December 2015 and to highlight the environmental and social issues that climate change will force us to address.

For me this is personal. After water and sewage inundates your home you are in shock and realise that you are no longer safe in your home, even if you have a home to return to. It is difficult for people who have not been flooded to image the horror and anger that such a situation creates, but anger and passion can drive us toward positive action for better solutions.

We must hold organisations to account and accept responsibility ourselves to bring about those solutions, as we did in the Great Yarmouth floods in 2006. There is no “one size” fits all. If individuals work together in their local communities we can change the status quo and develop innovative local and national solutions to flooding. In fact, WE MUST!

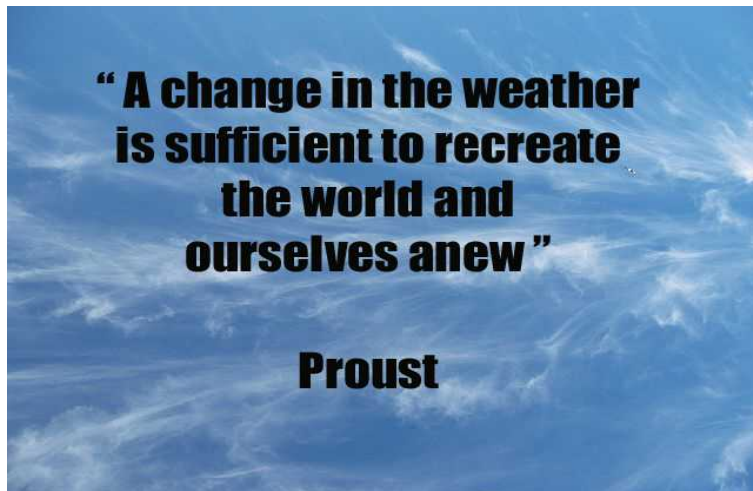
Extreme rainfall and flooding in Britain are happening more frequently as a result of climate change, and will continue to do so.
“...what we are witnessing is the predicted arrival of our future”
(Michael McCarthy, *Independent*, 7th December 2015).

Lynn Woollacott - New Winds

Apple trees fell long ago to the red fungus,
rose bushes shrivelled to brittle twigs.
Early leaf fall finished off
the trees in the distant wood.
The holly bush clings to life, black flies
gather into its curled leaves and lick frozen sap.
Hedgehogs with hunched shoulders
and visible ribs rummage among bones of blackbirds.
Slugs crawl onto windows, wailing
at their new found size and expertise, they've
adapted to the green fungus that thrives on polymers of spider
webs. There's been no fattening up of foxes, squirrels or hare;
most mammals have taken to hollow dwelling
in gardens. They huddle together, dish out
the last of the acorns, share crisp ladybirds,
munch on rain beetles that fell with the cold spell.

Lynn Woollacott

Poetry Society - Stanza Competition Commended.



Climate change teaches us – that climate risks are serious and tend, differentially, to victimise the most vulnerable: the poor, the elderly, the lonely, the uneducated, the foolish. Our awareness of changes in climate has made us much more aware and sensitive to the nature of risks that climate poses for societies. A growing world population, and hence increasing exposure, has also contributed to this awareness.

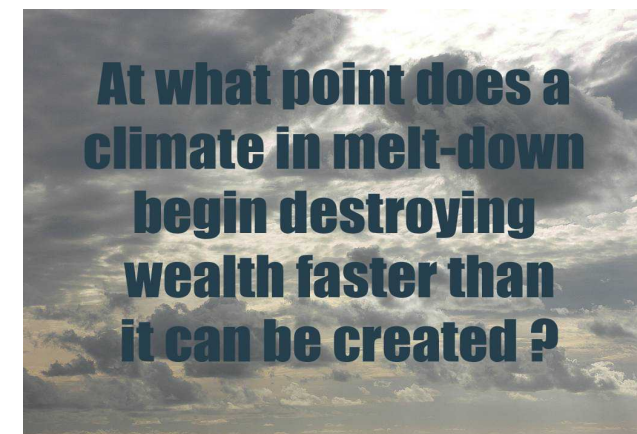
Many of these risks are not new – hurricanes, droughts, floods, tidal surges – and one story of humanity is the story of how we have suffered from such dangers in the past and how we have sought to protect ourselves against them. Stories about climate change teach us that we should be more alert to these climate risks, that we should seek to reduce the number of people who are vulnerable to them and that we should seek new ways to protect those who remain exposed to these risks.

Investigations into the causes of climate change have shown us – that the human world is a very unequal one. Not only has a small proportion of the world's (historical) population consumed a large proportion of the world's (historically) exhumed resources, but this very inequality of consumption has introduced a huge unmet aspirational demand for future development in many parts of the world.

The consumption of energy is the most visible index of such latent demand for development and that with existing technologies there can be no meeting of these development aspirations without a significant increase in energy, which if we don't want to alter the world's climate further must be zero carbon.

Our existing energy technology is highly dependent on gaseous and liquid carbon-based fuels derived from fossil sources that will not provide for any more than two more generations. A significant energy 'gap' demands a substantial – revolutionary transition in the world's energy technology: finding substitutes for oil and gas.

The answers have been clear to environmentalists for almost an entire generation. The idea of climate change – and hence one might say the purpose of climate change – is to learn and act.



Climate change is not the problem to be solved; climate change is the idea we must use if we are to understand the world in which we live.....Whether it be the islanders of Kiributi, the farmers of the Somerset levels, the Dutch or the people of Cumbria if we rethink the idea of 'Refugee' and 'Immigrant' and begin to think of systems of 'dignified climate migration' then we move beyond 'barbed wire nationalism'. Or put less politically, if we stay focussed on caring for people, regardless of colour, race, creed, religion, sexuality... we hold true to the ideas that underpin civilisation....in the face of all the resource and climate conflicts that are descending on us all.