

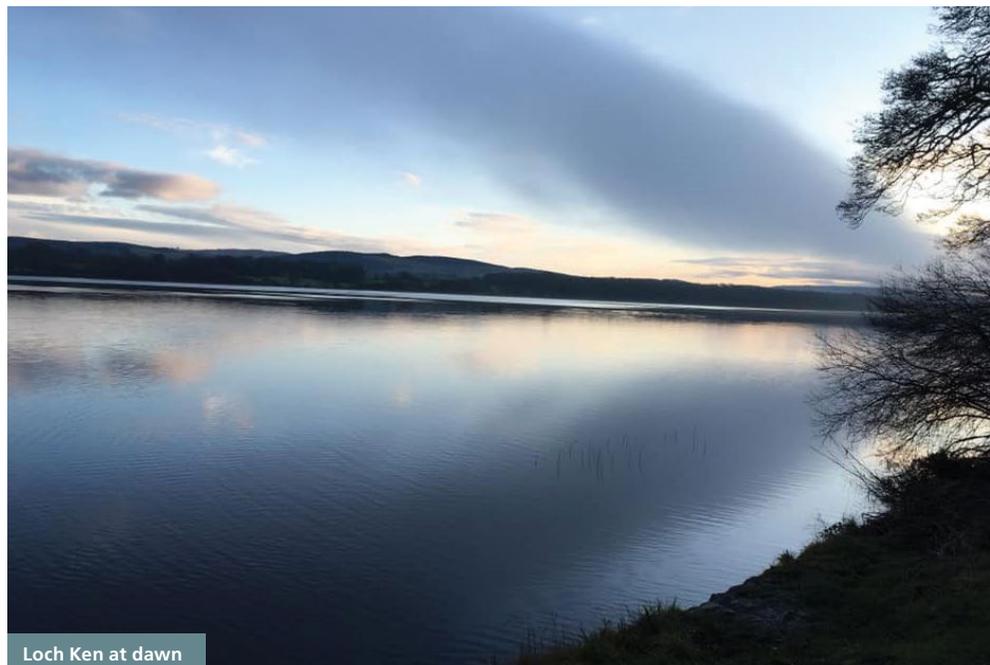
# CLIMATE READY KEN

What happens when a Community Development Trust initiates local efforts on climate resilience

This case study shares the insights of local partners from the Loch Ken Trust in Dumfries and Galloway, about their journey embarking on building climate resilience in the area as part of Adaptation Scotland's localities work programme 2020 – 2022.



**Adaptation  
Scotland**  
supporting climate change resilience

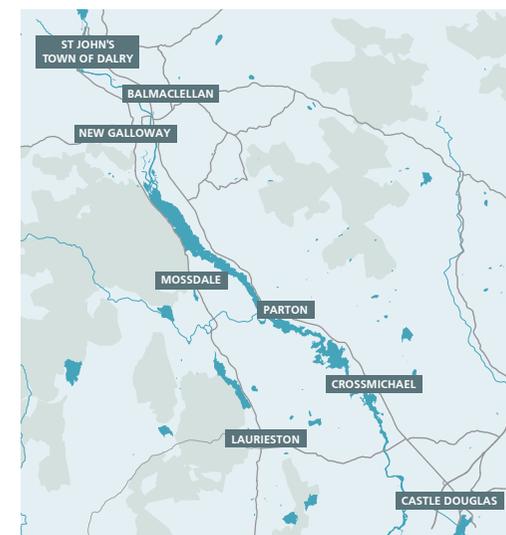


Loch Ken at dawn

## Background

In summer 2020, Adaptation Scotland began working with Loch Ken Trust on the Climate Ready Ken project. This project is part of Adaptation Scotland's localities work supporting communities to get ready for the inevitable impacts of climate change.

Climate Ready Ken's key aim has been to understand what these impacts are in the present day, what we are likely to see in future and how communities in the area can best prepare for and catalyse local adaptation actions.



## Geography & scale

Climate Ready Ken works within the same geographical area covered by the Loch Ken Trust, which includes Loch Ken, the largest body of freshwater in Southern Scotland, and the towns and villages that surround it: St. John's Town of Dalry, Balmaclellan, New Galloway, Mosssdale, Laurieston, Parton, Crossmichael and Castle Douglas. The area also includes a range of special protected areas, including the Ken/Dee Marshes Nature Reserve.

## Partners Involved

The project was initiated by the **Loch Ken Trust** (LKT), a charity that works to put the community of Loch Ken at the heart of decision-making that affects them. Barney Fryer, LKT Officer led LKT's role in the project. Other partners included the **Galloway Glens Landscape Partnership** with input provided by McNabb Laurie, Team Leader and Nick Chisholm, Project Officer. The wider project steering group included **Galloway and Southern Ayrshire UNESCO Biosphere**, with input from Ed Forrest, Manager, and **Dumfries and Galloway Council** with input from Sarah Farrell, Climate Emergency Project Officer.

## Funding

The project was made possible through the contribution of staff time of all partners involved, including a £2000 budget from Adaptation Scotland, matched by Galloway Glens Landscape Partnership.

## Local climate change challenge

In 2019 Dumfries and Galloway Council, alongside many other local authorities, declared a climate and ecological emergency. The Council also adopted the target of being a net-zero carbon region by 2025 – thought to be the joint-most ambitious target anywhere in the UK. While declaring a climate emergency is an important step towards recognising the scale of the crisis, it does not by default deal with the unavoidable impacts of climate change that are already locked in because of past and present greenhouse gas emissions. For more information about the Council's climate emergency declaration and the net zero target, see here: <https://www.dumgal.gov.uk/article/21773/Climate-Emergency>.

To respond to the challenge of adapting to climate change, there first needs to be a shared community understanding that it is an issue locally. A series of workshops and conversations with the local residents identified a number of **climate change related concerns**:

- Less predictable weather
- More frequent extreme weather events

- Seasonal changes:
  - In winter people observe less snow and warmer temperatures alongside increased intense rainfall over short periods of time and higher variability in river flows
  - In summer residents have been experiencing longer and more frequent periods of extreme heat, shortages of water (such as for livestock) and dry spells, including extremes of drought and low river flow followed by more intense floods.
- There are a number of **homes** around Loch Ken, in Crossmichael and Parton in particular, that are located in very close proximity to the Loch, putting their residents at higher risk of river and surface water flooding. In Castle Douglas alone there are at least 180 residential properties and 30 non-residential properties at risk of flooding with annual average damages amounting to £430,000<sup>1</sup>.
- The implications for **people's health and tourism**, which plays a significant role in the local economy, are significant. While warmer summer temperatures may bring more visitors to enjoy local water sports, this puts a strain on existing infrastructure and there is a need to ensure more shaded spaces due to the increased risk of heat stress.
- People's **mobility** is affected, especially by the less predictable weather and the increased likelihood of flooding. As public transport is very limited in the area and people are mainly reliant on private cars to get around, this creates challenges especially for young people and elderly.

While these changes may be perceived as milder in comparison to intense floods, hurricanes and extreme heat in other countries, they still have significant impacts for local people and nature. Throughout the project we talked to and held events with local groups and individuals to link the changing climate with the **lived experience of its consequences and impacts**. For example:

- With **farming** being important in the area, flooding poses increased risk to livestock, crops and access to land. Farm buildings might stay damp and need more maintenance to maintain good conditions for the animals they house.

<sup>1</sup> Solway Local Flood Risk Management Plan

The lived experience of climate change and its consequences resonate with what the most up to date climate trends and projections show.

[View the climate projections for Scotland summary.](#)

## Loch Ken Trust's approach to building climate readiness

To prepare for and cope with the challenges brought about by climate change, we tried a few different approaches. They were developed in

an iterative manner with the Adaptation Scotland project team, responding to lessons learned along the way. While there is no single recipe for how a community organisation can drive climate change adaptation and resilience, we are sharing what worked for us!

## Raising awareness and co-creating local climate change knowledge

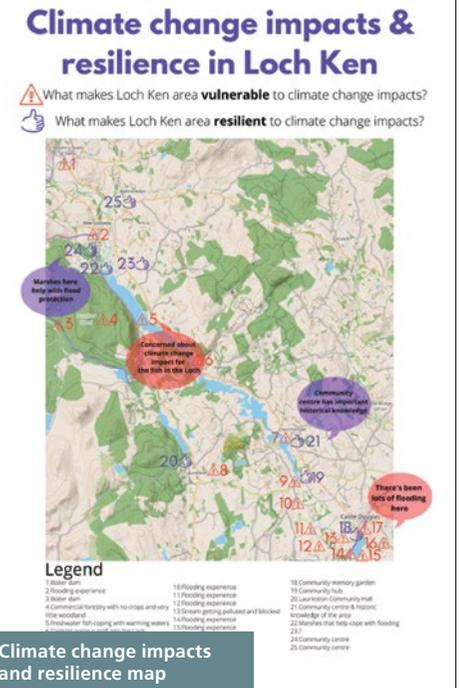
While tempting to jump straight to 'doing something' about climate change, it was important to first open up a conversation about climate change

adaptation and resilience. With climate change mitigation being high on the local agenda (for example ongoing debate on alternative energy generation sources, such as windfarms), we discovered that adaptation was a more novel concept. This led to the need to build a shared understanding of the fact that even if all greenhouse emissions were to be stopped immediately, we are still going to experience climate change that is already locked into the system as a result of past and present emissions. We did this by:

- **Running a series of 'Whirlwinds'**, one-hour interactive sessions that both introduced participants to the difference between climate change mitigation and adaptation, and allowed us to collect valuable local insights about the observed impacts of climate change and emerging priority areas for actions.

[Download a template of the whirlwind presentation that you can reuse in your own community here.](#)

- **Hosting an in-person 'Climate change impacts mapping'** activity as part of a local festival, where we heard first-hand where and how



people experience climate change and what existing infrastructure/ places make the area vulnerable or resilient to its impacts. There were over 30 contributions to the map that allowed us to pin down what was previously being discussed in abstract to specific places in the local area, creating a helpful resource for informing local resilience planning.

[See our guide to running a similar mapping activity in your own community here](#)



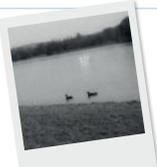
The Climate Ready Ken team, including (from left) Barney Fryer (Loch Ken Trust), Iryna Zamuruieva (Adaptation Scotland), McNabb Laurie (Galloway Glens), Alan Smith (Loch Ken Trust), Nick Chisholm (Galloway Glens)



## The Kelpie of the Ken

*"Loch Ken is my home, I rely on it for shelter, food & protection."*

<b>First Sighting</b>	7th January 1864
<b>Habitat</b>	Loch Ken
<b>Species</b>	Scottish Kelpie
<b>Diet</b>	Fish, grass, leaves & buds
<b>Life Span</b>	Who knows!
<b>Population</b>	1



Kelpie persona, developed by CRK partners

### Bio

The Kelpie of the Ken is a mythical creature living within Loch Ken - Don't worry it's friendly! The Kelpie has lived within the loch peacefully with the other wildlife but lately climate change means it is struggling to find suitable shelter and food.

The Kelpie is very shy but if you follow the code of the Loch and keep it's home clean you may catch a glance of it peeking out of the loch to say hello!

### Needs & Goals

- Having a safe home to live in
- Finding plenty of food in and around the loch
- A quiet local area to explore and enjoy

### Challenges

- Variable Weather
- Lack of food
- Fear of vehicles when exploring the area

### Personality

Shy	●	Bold
Friendly	●	Hostile
Curious	●	Ordinary
Adventurous	●	Cautious

### Climate Change

#### What Changes Are Affecting Them?

- Forest Fires
- Water Quality
- Variable Weather
- Flooding

#### What Are the Impacts for Them?

- Impact to food supply
- Prevents from exploring local area
- Struggling to live in warmer water
- Environment not safe

#### What Can Enable us to Adapt?

- Wanting to protect our local wildlife
- The want to keep local area a popular tourist destination
- Ensuring the livelihood of the Kelpie

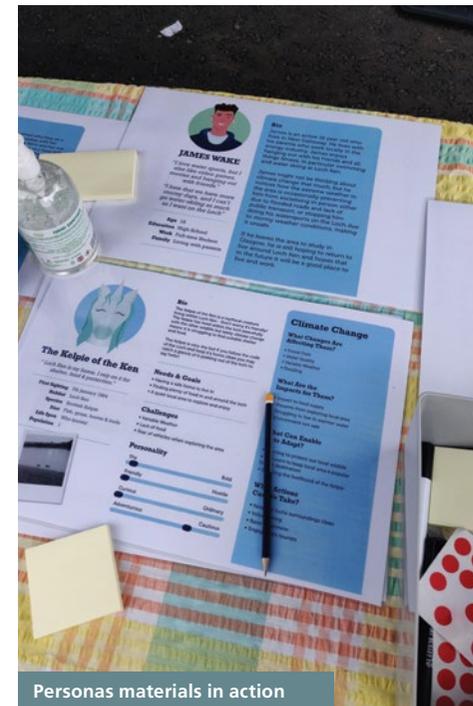
#### What Actions Can We Take?

- Keep the lochs surroundings clean
- Volunteering
- Raise awareness
- Engage with tourists

- **Developing 'Climate change personas'**, a set of four characters, based on local identities designed to better understand the intersecting impacts of climate change on vulnerable groups (women, young people, elderly and non-human inhabitants of the area). We used these to help facilitate conversation at the in-person events.

 A template for creating your own climate change personas can be found here.

- **Sharing Loch Ken's adaptation journey in the media:** throughout the project Climate Ready Ken was featured in several national and local publications, helping us raise awareness of our plans and activities, such as a BBC Scotland Climate Ready Ken **story**, BBC Radio interview with Loch Ken Trust (aired live), article in the Galloway News (in print), and a piece in the **Royal Town Planners Institute Magazine**.



Personas materials in action

## Working with existing contacts

Building local resilience and adapting to climate change is always a collective undertaking. The allies you bring on board are important companions on the adaptation journey. Two months into the project, we organised a special session for all local ward councillors to inform them about Climate Ready Ken and gather their concerns related to climate change. It was important to do this at the very beginning of the

project, to make sure they were aware of our work and had the opportunity to contribute early on, as we were still setting out the exact goals of our collaboration. One of the councillors, Dougie Campbell, became an informal elected member 'spokesperson' of Climate Ready Ken, helping us build legitimacy and visibility at the institutional level.

## Building new relationships

We used the time within the project to also build new relationships, engaging key local players in climate change resilience and adaptation. For example, we connected with the local branch of the National Farmers Union Scotland (NFUS), as it was recognised farming plays a significant role in the area and it is crucial that they are part of the conversation. An in-person event for local farmers exploring local climate change impacts and ways of building resilience is now planned, led by the NFUS with the support of the Loch Ken Trust.

## Mainstreaming climate change adaptation into existing initiatives

The beginning of Climate Ready Ken coincided with the Loch Ken Trust starting to develop the **Loch Ken Plan** that aims to support sustainable local communities and sets out a path for Loch Ken communities to work towards all 17 of the UN Sustainable Development Goals. While originally there was an expectation that Climate

Ready Ken would “tick the box” of dealing with climate change within the plan, it soon became clear that the project is just a milestone in the ongoing adaptation journey.

The Loch Ken Plan now acknowledges the ongoing work of Climate Ready Ken and the importance of continuing to help communities prepare for and adapt to the changing climate in the ‘Protecting Our Environment’ priority.



## Adaptation Scotland’s role

Adaptation Scotland made staff time and a small amount of funding available for the project. Adaptation Scotland also helped to facilitate the collaboration, including supporting all partners in creating and defining their own approach to working on climate change adaptation and resilience, and supporting them to run the external project events and workshops. Instead of pinning down specific outcomes at the very beginning, we allowed these to emerge more organically throughout the project. This approach has allowed us to create a “*genuine, iterative and unique project structure and direction that is owned by [the local partners]*”. Adaptation Scotland is committed to supporting local ownership of locality projects, and the experiences of our Climate Ready Ken partners demonstrates the value of this approach.

Adaptation Scotland’s support has been instrumental in helping the Climate Ready Ken team to:

- 1) Give focus to the topic of adaptation which has not previously been well represented locally
- 2) Draw in national perspectives and experience on adaptation
- 3) Connect with other partners including Historic Environment Scotland and others to provide data on local issues
- 4) Give local partners the confidence to represent the topic of adaptation in other local forums and channels.
- 5) Design and facilitate events and workshops, and develop communication and engagement resources such as personas, mapping activities and the whirlwind formats.

## Impact

Climate Ready Ken has **opened up a conversation about building resilience and adapting to the impacts of climate change**, as part of wider discussion about the area's future. By hosting a series of events that provided a structured and interactive approach to discussing local climate change impacts, the project has laid an important foundation for acting upon local knowledge and ensuring people and nature in the area are thriving in the face of climate change. The partners also now feel confident

in using the resources generated throughout the project to talk about climate change adaptation without Adaptation Scotland's input.

Among the **local actions**, catalysed by the Climate Ready Ken project are plans to:

- Establish the Loch Ken Ranger & Resilience Service to act as 'first responders' during extreme weather events;
- Commission a baseline ecosystem assessment of Loch Ken to

understand what needs to be protected and enhanced;

- Support Dumfries and Galloway Council in developing a 'House Welcome Pack' that includes simple information about local climate change impacts and adaptation actions for home owners;
- Continue working with the NFUS to engage with local farmers on climate change adaptation.

At the **regional level**, the project played an important role in putting climate change resilience and adaptation on the agenda, with Loch Ken Trust contributing to Dumfries and Galloway Council's resilience planning. Dumfries and Galloway Council are also intending to use Climate Ready Ken's engagement model across the entire Local Authority area. The resources generated throughout the project can continue to be used locally without Adaptation Scotland's involvement or be adapted and **re-used by other localities**.

Local partners in Dumfries & Galloway hope that while the project has technically finished, strong relationships will remain in place between Adaptation Scotland and local partners.



## Acknowledgements/Copyright

Case study content was produced in collaboration between Adaptation Scotland and Climate Ready Ken partners.

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Adaptation Scotland is a programme funded by the Scottish Government and delivered by Sniffer

