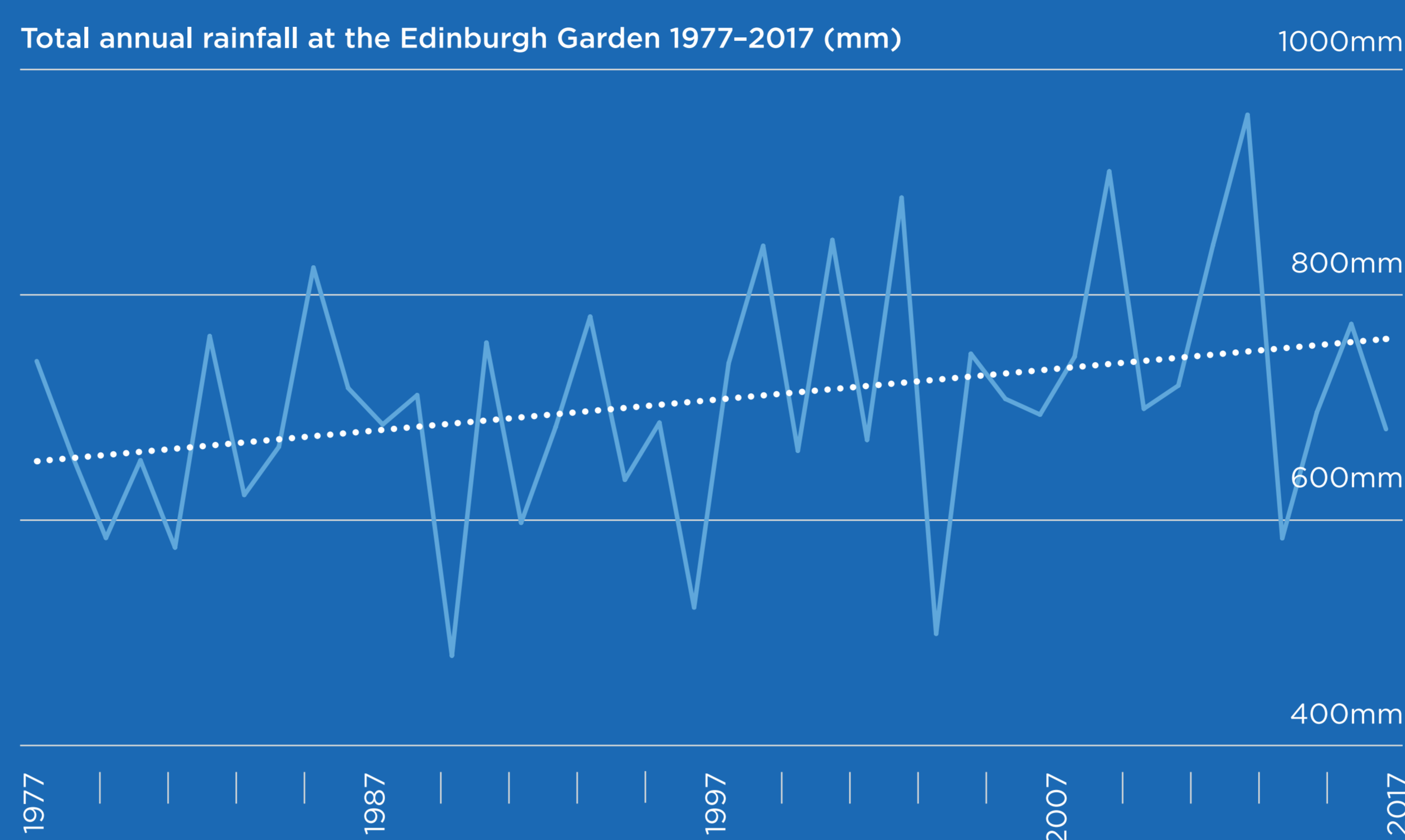




## The problem

The climate is changing, and in Scotland heavy rainfall is becoming more frequent and intense.

Total annual rainfall at the Edinburgh Garden 1977-2017 (mm)



← This graph shows the upward trend in rainfall over the last 40 years.

↑ After heavy or frequent rainfall areas of the Garden become waterlogged and flooded. We need to adapt to cope with more extreme rainfall events so that the work of RBGE is not interrupted and the public can continue to enjoy the garden.

## Creating a Raingarden Climate Ready RBGE



Royal  
Botanic Garden  
Edinburgh

## Our solution

In partnership with Heriot-Watt University, RBGE is creating a raingarden on the Birch Lawn to reduce the impact of heavy rain.

A raingarden is a shallow planted basin that allows rainwater to infiltrate (drain) naturally into the ground using free-draining soil. Its planting will include native shrubs, wildflowers and grasses that can withstand occasional flooding while also improving biodiversity.

As well as providing a simple, attractive and wildlife-friendly way of reducing flood risk, we hope our raingarden will provide inspiration for visitors and other institutions who may need to solve similar problems.



Left and above, top row: A diverse mix of native Scottish plants that can tolerate a wide range of conditions from temporary water logging to soils drying out will be established, providing a rich patch of wildlife friendly habitat. (photos: grasshopper © Steve Marlow CC licence; bumblebees © Ivar Leidus CC BY-SA 4.0 licence; butterfly © Rob Jones)

Bottom row: A mini-disc infiltrator was used to measure the soil infiltration rate to inform the design of the raingarden (photos: David Kelly)

### OUR PARTNERS IN THIS PROJECT

