

# 12 What is proposed for Culloden Park?

Downstream of Culloden Park, the stream channel and the structures that cross it are not large enough to contain flood flows. Modifications to the downstream channel are not practical in the urban area, so we have investigated ways to reduce the flow. We have identified that in combination with the Smithton Park storage area, we can reduce flows enough to reduce the risk of flooding by storing more flood water in Culloden Park. It is proposed to reshape the lower area of the park and form an earth embankment and flood wall along Keppoch Road. The existing burn will be diverted through the landscaped area to form a natural meandering channel and will pass through a flow control structure buried in the embankment.

Concept plan: note that this shows general issues and solutions; it is not intended to represent the detailed scheme



## What are the benefits to the community?

At present, the park is predominantly an area of flat, mown grass. The burn runs along the western boundary. Our proposals will involve regrading the western edge of the park and creating 220m of new, meandering naturalistic channel. The channel will offer a wide variety of new habitats that should increase the ecological and biodiversity value in an otherwise largely featureless area. New paths, including step-free routes to maintain ease of access, will allow users to interact with a more attractive, dynamic watercourse that offers scope for informal play and education. There will be opportunities to create seasonal visual interest through wildflower meadows and more varied planting.

[top] Concept visualisation, showing boardwalk and dipping platform with new habitat areas



[centre] New paths will be informal but hard-wearing and accessible to all



[below left] Storage area: dry during normal flows

[below right] Storage area: 'full' during high flows

## What are the impacts on Sports facilities?

This option has been designed to minimise the impact on sports by using the lower areas of the park that are poorly drained and less suitable for year round use.

## Will it be safe?

Yes. The flood storage area is designed for extreme flood events and to be used by the community on a day-to-day basis. Flood water will only be stored during high flows, which have a 3.33% annual probability of occurring, or to put it another way, once every 30 years. During a flood, water will gradually fill the storage area over a period of hours. When full, the maximum depth of water will be around 1.5m. Safe, dry access will be available around the storage area that can be used by the public or the emergency services. In very rare events, less than 0.5% annual probability in any year, flood water will spill over the embankment back into the stream channel.

