

6 What has been considered in developing the scheme?

At the last public consultation you asked us to develop the preferred Flood Protection Scheme by:

- Restoring the watercourses to reduce uncontrolled erosion and improve flow capacity
- Reduce the risk of blockage at structures
- Incorporate catchment flood storage to reduce flows through sensitive areas

You also asked us to consider the impacts on green spaces within Smithton and Culloden as these areas are valued by the community. It was important to you that proposals were safe and where possible amenity improvements could be incorporated within the design.



Channels routed underground through culverts are dangerous and prone to blockage and damage. Collapsed headwall



Locations of the next phases of the scheme. Further details are provided on the numbered boards.

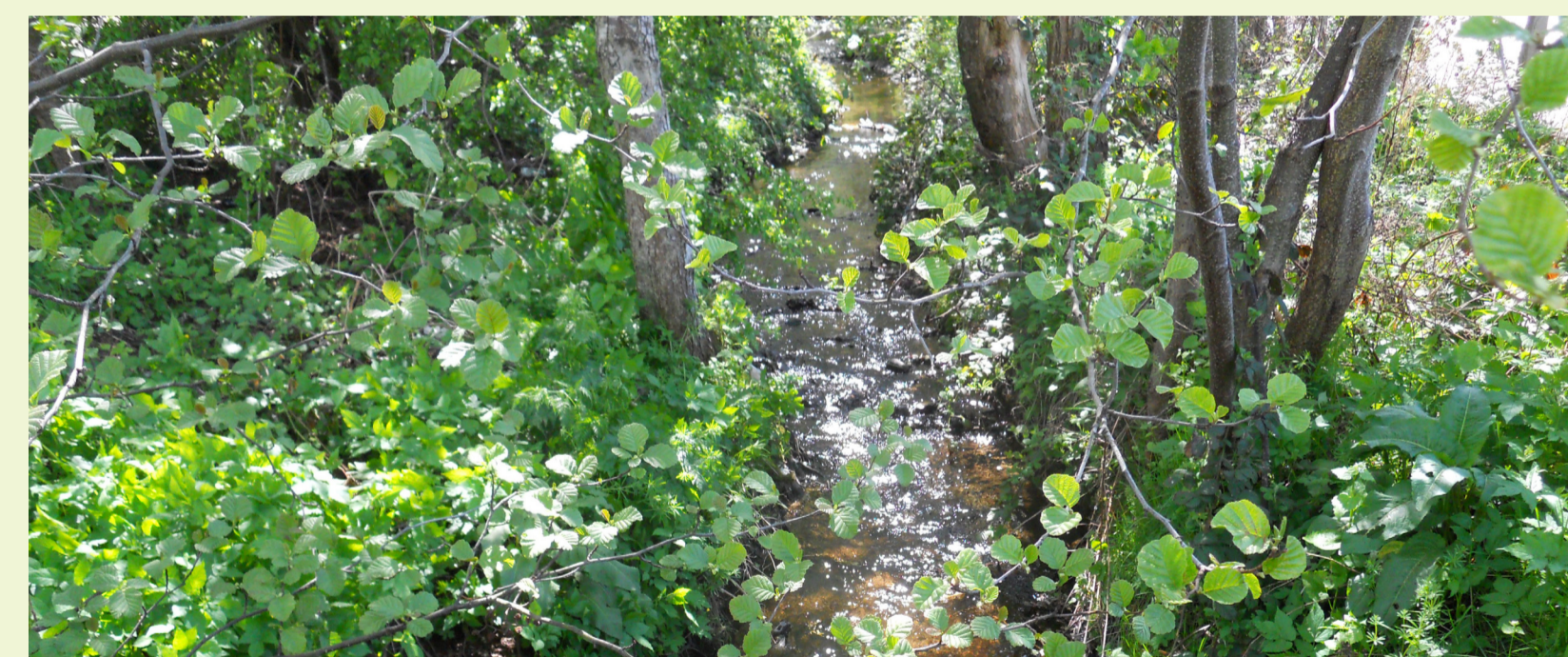
Channel modifications

We have assessed the ability of the Smithton Burn; Culloden Burn West; and the Tower Burn to contain flows through the urban areas of Smithton and Culloden. As part of this assessment we also looked at the causes of excessive sediment (gravel) movement during high flows. We used the information we collected to identify the reaches that would make the largest improvements to reduce flood risk and would be practical to build, maintain and add value to the community.

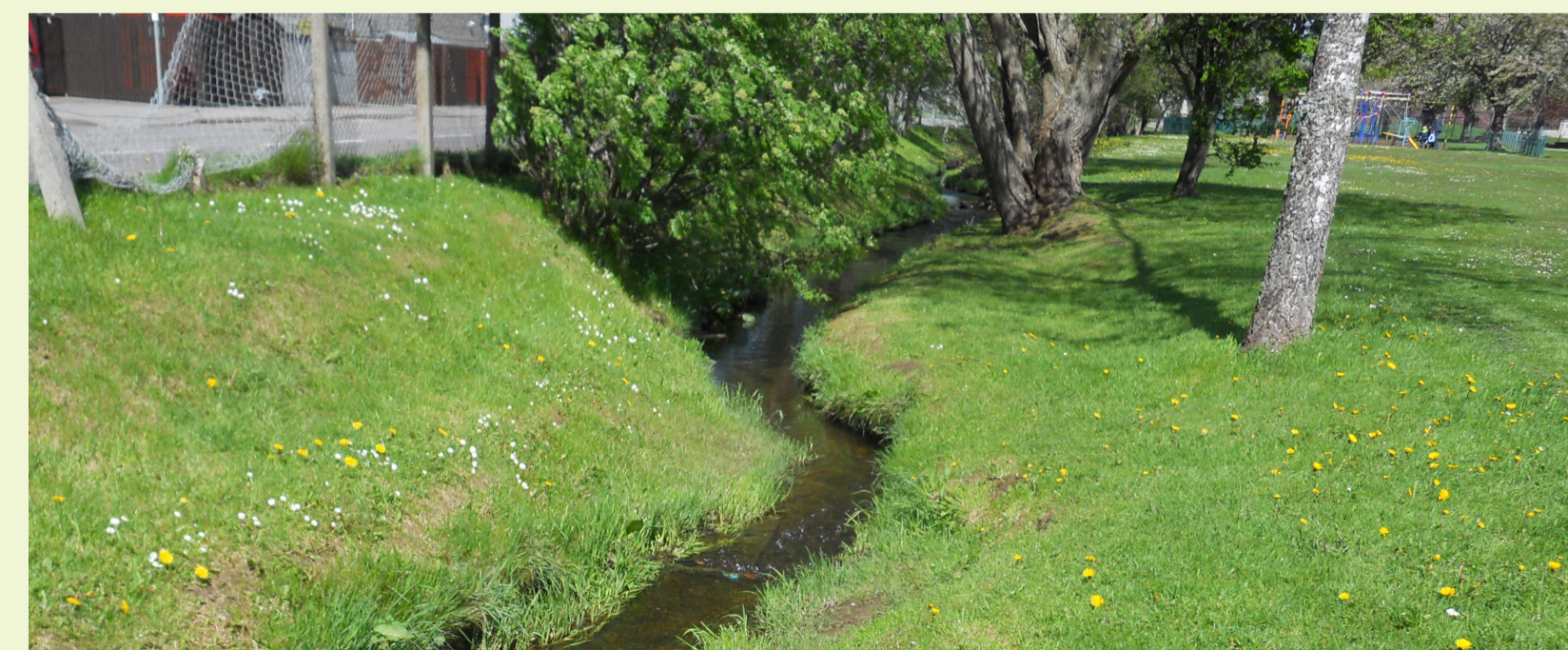
Flood storage areas

Our assessment of the watercourses through Smithton and Culloden identified that some areas did not have sufficient capacity to contain flows that could occur on a regular basis, but were in locations that made it difficult to make sustainable improvements. In these areas we plan to reduce flows within the watercourses. This will be achieved using flood storage within the Smithton Park and Culloden Park.

Under day-to-day conditions, the flood storage areas will be dry and used for public open amenity space including sports recreation. Safety will be improved by removing underground pipes in which the watercourses flow and restoring new natural stream channels that will meander through the park areas. Access and visual interest will be a key element that will inform our designs. We will include numerous elements that will be of benefit to the local community, including new pathways, bridges, wildflower meadows, dipping platforms and boardwalks. As vegetation matures over time, these will create visually exciting landscapes, rich in ecology, providing a valuable resource for education and offering opportunities for natural play.



Channels often provide a 'green network' of ecologically-rich habitats within urban or developed areas. Our plans will build on this potential.



Water adds extra interest to public parks and spaces. We are looking to improve the quality and accessibility of these types of environments.

Other Options

Other options were considered including direct defences and property level protection (PLP). Improving the watercourse capacity was more sustainable. The measures chosen have a longer design life than PLP.



Water offers great opportunities for natural, unprescriptive play and exploration. Our designs will ensure that such features are safe for all users.