

Restoring the River Dare - Upstream

Five restoration opportunities have been identified for the upstream reach of the River Dare:

1. Remove brick lined channel/flume and replace with a step-pool type channel with step-pool type channel
2. Culvert replacement
3. Culvert inlet weir removal
4. Hillslope planting and cross-track drainage
5. Small weir removal

4. Hillslope planting and cross-track drainage

Woodland or hedge planting on the hillside could help to catch sediment and slow storm water before it enters the river. Cross-track drains could redirect water away from tracks and other assets. This would benefit the River Dare as track loss, caused by storm water, is contributing fine sediment to the river.

2. Culvert replacement

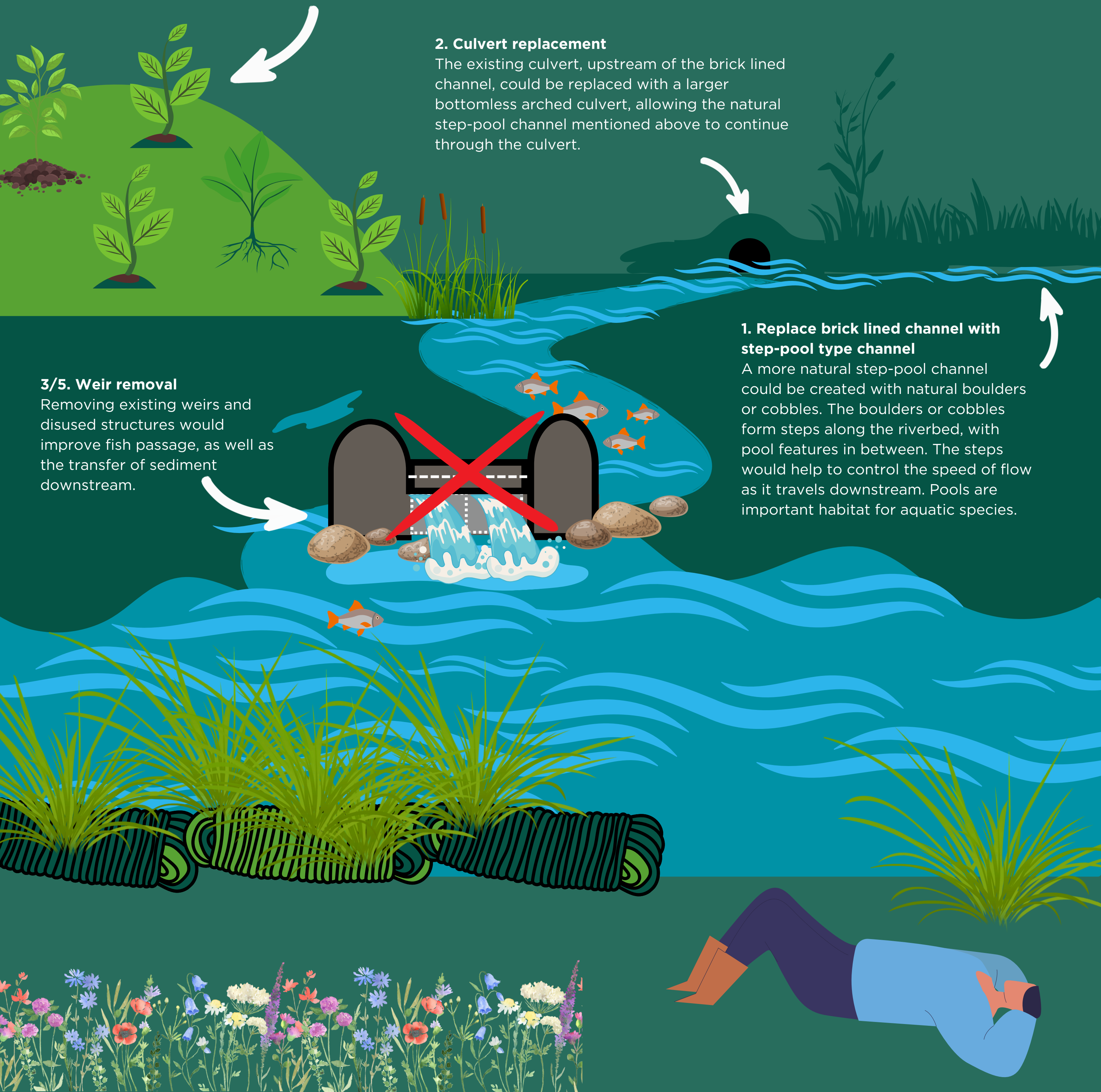
The existing culvert, upstream of the brick lined channel, could be replaced with a larger bottomless arched culvert, allowing the natural step-pool channel mentioned above to continue through the culvert.

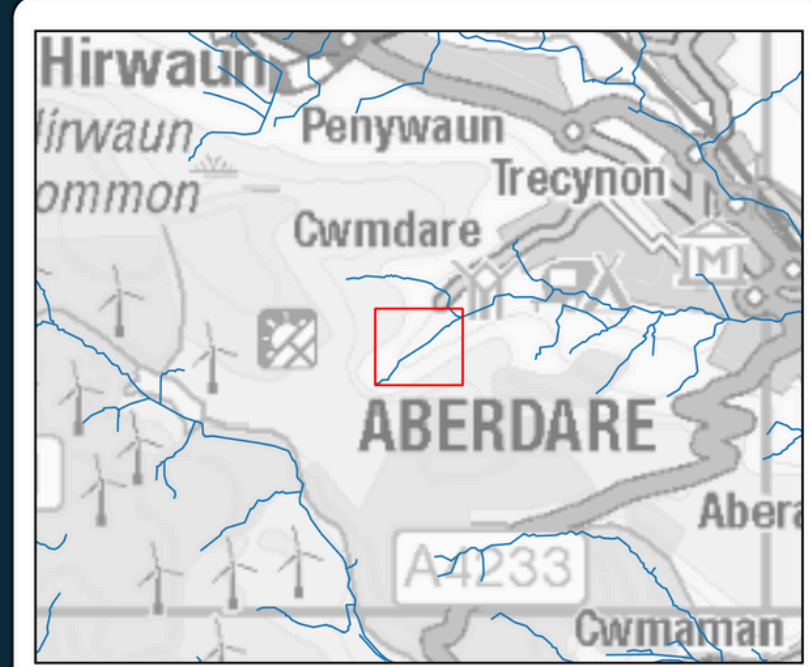
3/5. Weir removal

Removing existing weirs and disused structures would improve fish passage, as well as the transfer of sediment downstream.

1. Replace brick lined channel with step-pool type channel

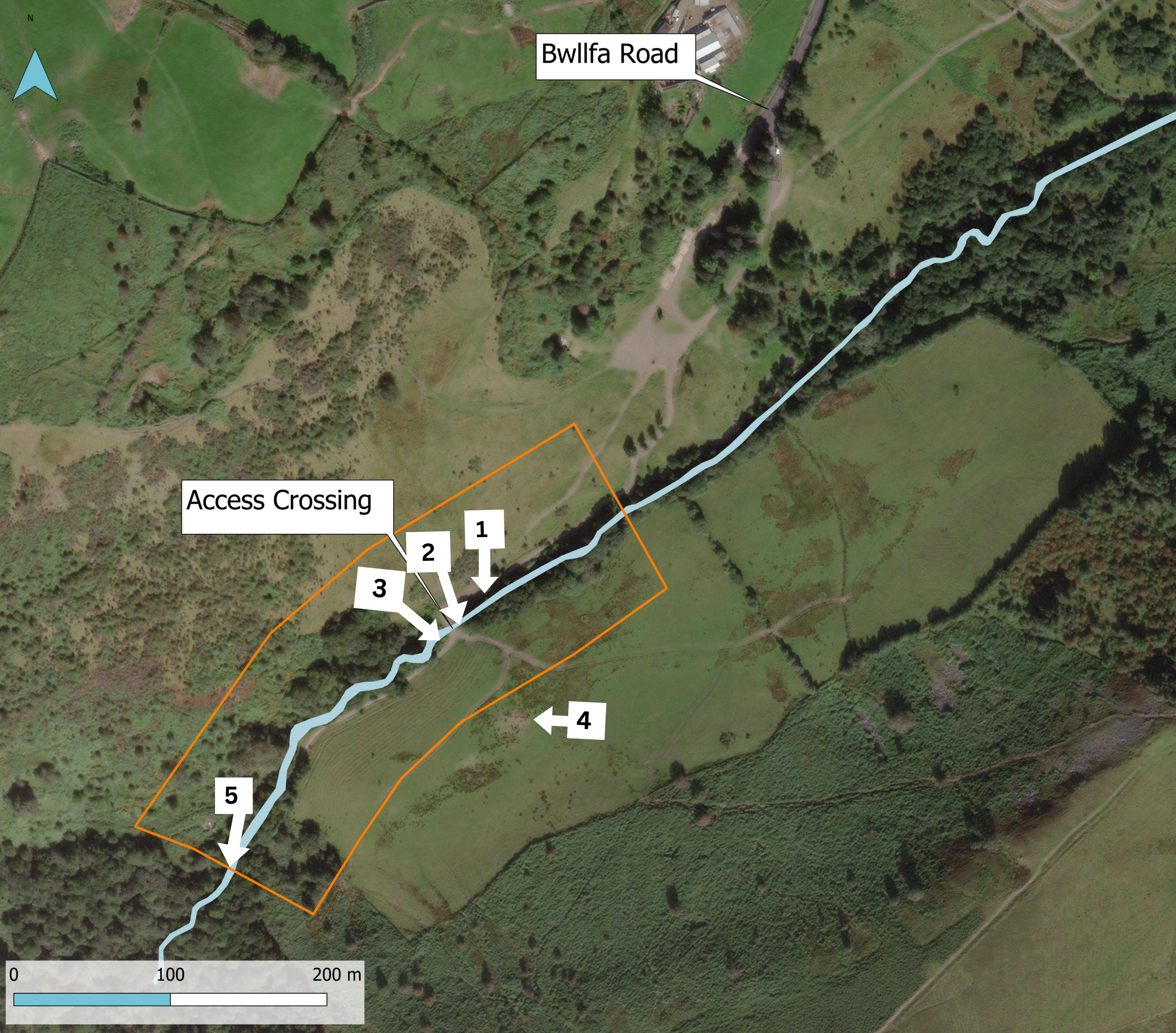
A more natural step-pool channel could be created with natural boulders or cobbles. The boulders or cobbles form steps along the riverbed, with pool features in between. The steps would help to control the speed of flow as it travels downstream. Pools are important habitat for aquatic species.



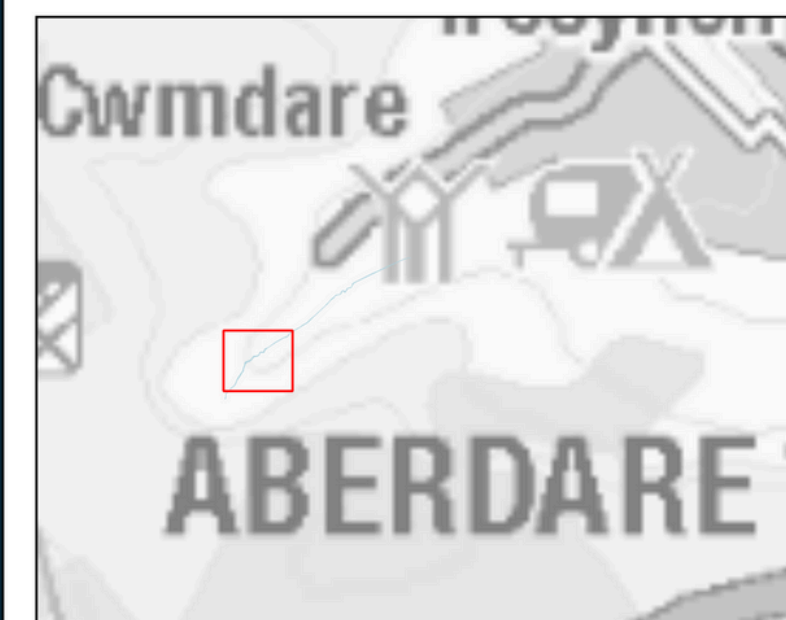


River Dare - Upstream Restoration Project Area

- Legend**
- Upstream Restoration Area
 - River Dare










Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

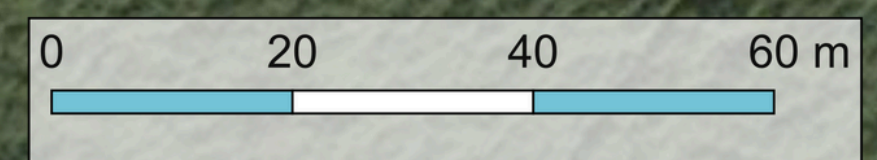


River Dare - Upstream Restoration Reach

Legend

-  River Dare
- Restoration Opportunities**
-  Small Weir Removal
-  Hillslope Planting and Cross Track Drainage
-  Brick Lined Channel Removal
-  Foot Bridge
-  Culvert Inlet
-  Culvert Modification

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Restoring the River Dare - Downstream

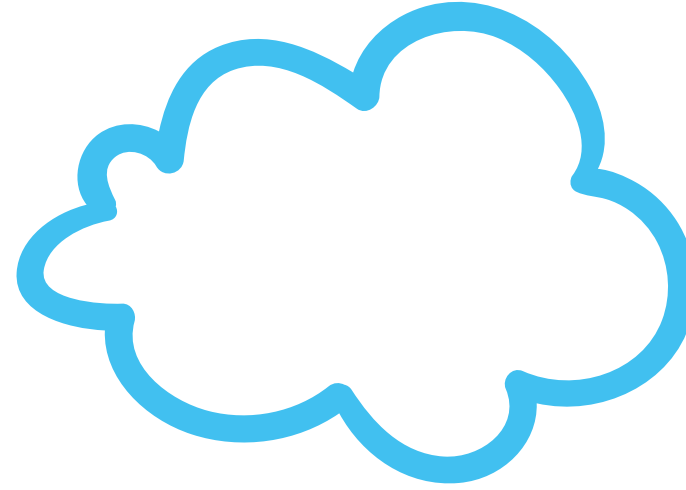


Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales

Four restoration opportunities have been identified for the downstream reach of the River Dare:

1. Footbridge replacement
2. Bank reprofiling and installation of green engineered bank protection (left bank)
3. Removal of blockstone
4. Footpath relocation

JBA
consulting



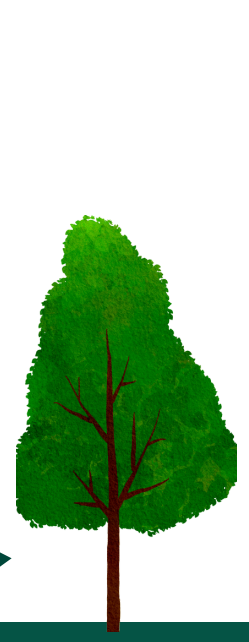
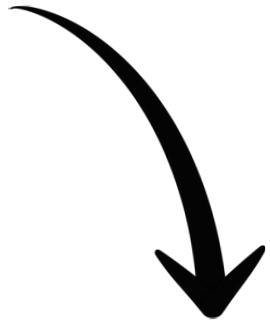
1. Footbridge replacement

The footbridge here will need to be replaced if bank modification is removed. The key benefit is that this replacement could potentially improve access to the river and increase public enjoyment of the area.

4. Footpath relocation

Consideration has been given to relocation of the riverside footpath to provide more space for the river and its floodplain.

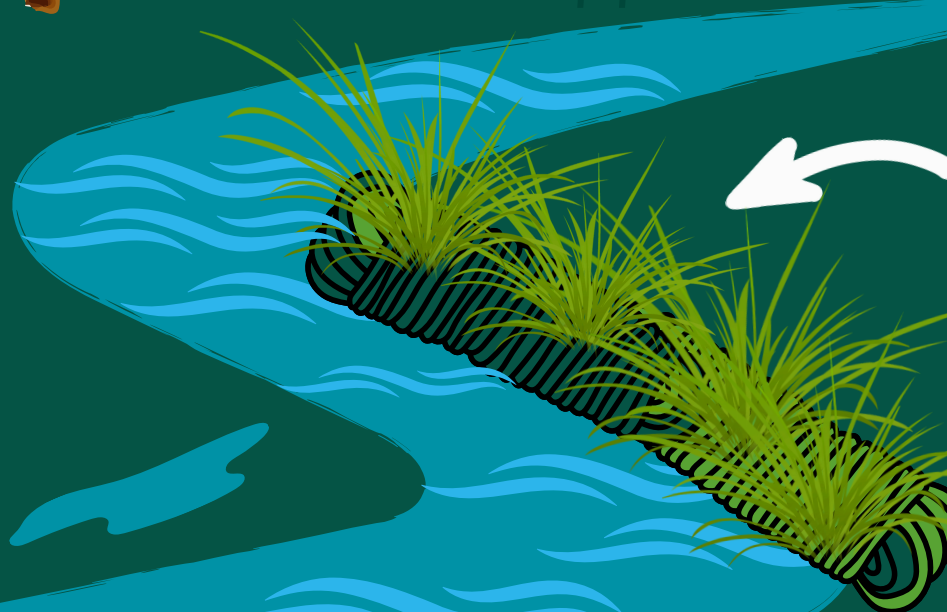
The relocated footpath would be fully accessible to maintain public access to the river.



2. Bank reprofiling and installation of green engineered bank protection (left bank)

The River Dare channel is steep and unnaturally deep. This opportunity focuses on reducing the bank height to create a shallower angle, and restore connectivity to the floodplain at high flows.

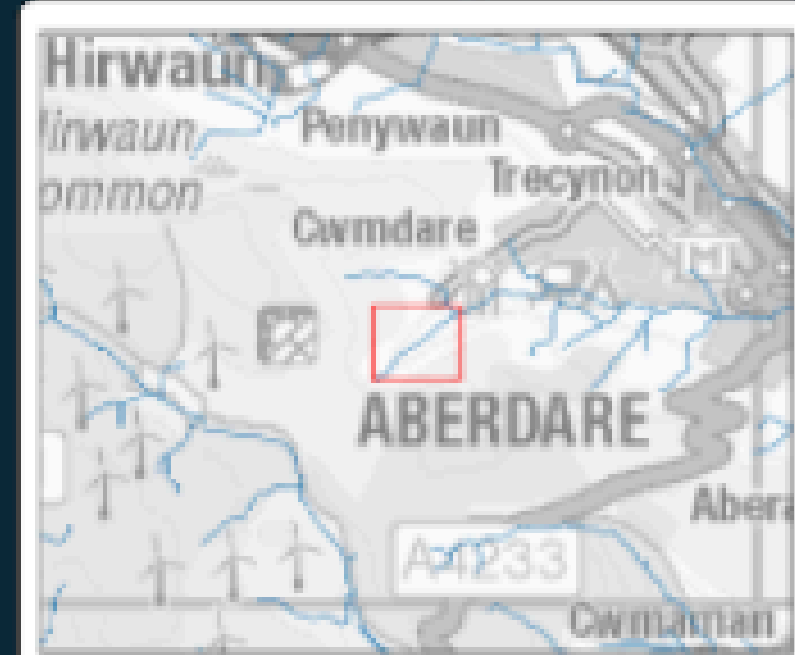
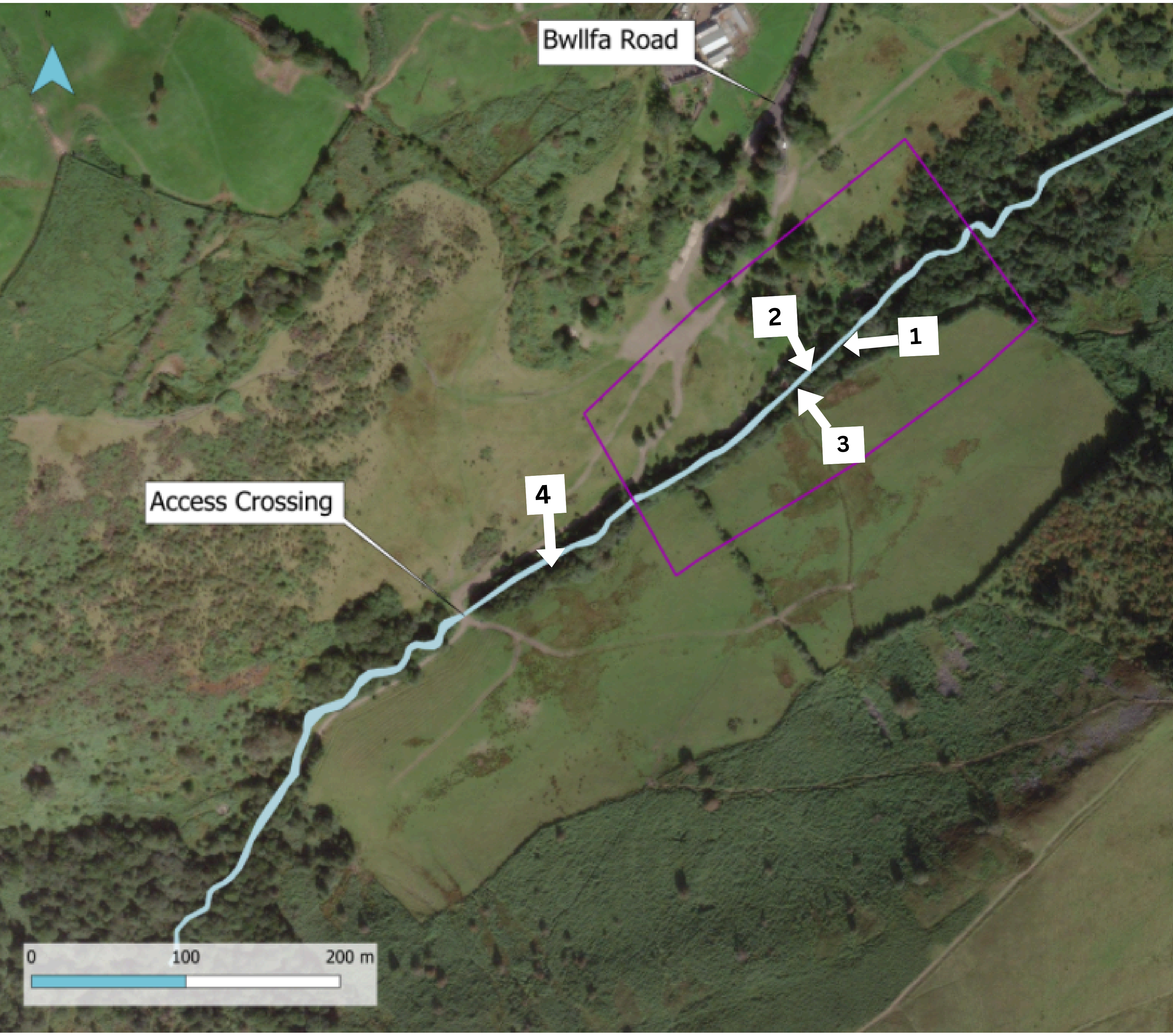
Blockstone would be removed and replaced with more sustainable green engineering solutions, such as coir matting (natural matting with plants in it). This would support the new bank and promote vegetation growth.



3. Removal of Blockstone

To re-naturalise the riverbank





River Dare - Downstream Restoration Project Area

Legend

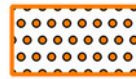

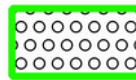

-  Downstream Restoration Area
-  River Dare

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



River Dare - Downstream Restoration Reach

Legend

-  River Dare
-  Blockstone Removal or Modification
-  Foot Bridge
-  Blockstone Modification
-  Footpath Relocation

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

