

Dalmakether Burn Spawning Habitat Improvement Project

Introduction

The Dalmakether burn is a low gradient burn that enters the River Annan just south of Johnston Bridge. Much of the channel has been heavily modified and straightened over many years. Despite this there is fairly good nursery habitat for trout with lots of draped vegetation and undercut banks. Spawning areas though are at a premium with areas of unsorted very silty gravel acting as the only possible media for trout to use. The silt burdens in this material mean that egg survival is likely to be very low which will suppress the trout population in the area. This project aims to use natural processes within the river to clean the gravel in three locations and create areas where trout can spawn in suitable conditions. The project will be monitored over the course of the winter to ensure that no damage is caused to the river or banks via the intervention.

Method

In order to clean the gravel we have placed three small current deflectors in the river. They are fixed to the river bed using narrow untreated timber stobs and an untreated timber rail is nailed over the top. The river will flow over, under and around them and the scouring process that they cause will force the silt out of the gravel in the immediate vicinity. The gravel will be sorted into differing sizes and create areas spawning media for a variety of fish sizes. Each structure will occupy less than 10% of the bed width of the watercourse.

It is thought that the prime beneficiary will be brown/sea trout but as salmon are also known to frequent the burn in low numbers they may also be helped. Because the timber used is untreated this can only be described as a temporary structure as it is expected that the material will rot after a few years.

Monitoring

The structures will be inspected after each flood event to check for unwanted effects. Fully quantitative electrofishing has taken place for two years prior to introduction and this will be continued over the next few years. Bed widths and depths have been measured in the sections where interventions have taken place and these will also be measured at regular intervals. Photographs have been taken at the different locations, both before and after intervention and will continue to be taken on a regular basis after each flood event.

Site 1 E 311064 N 592111



Bed width 2.9m. Water depth uniform 5cm.

Site 2 E 311034 N 592134



Bed Width 3.1m. Water depth uniform 6cm.

Site 3 E 311016 N 592145



Bed Width 3.2m. Water depth uniform 3cm.

Location Map

