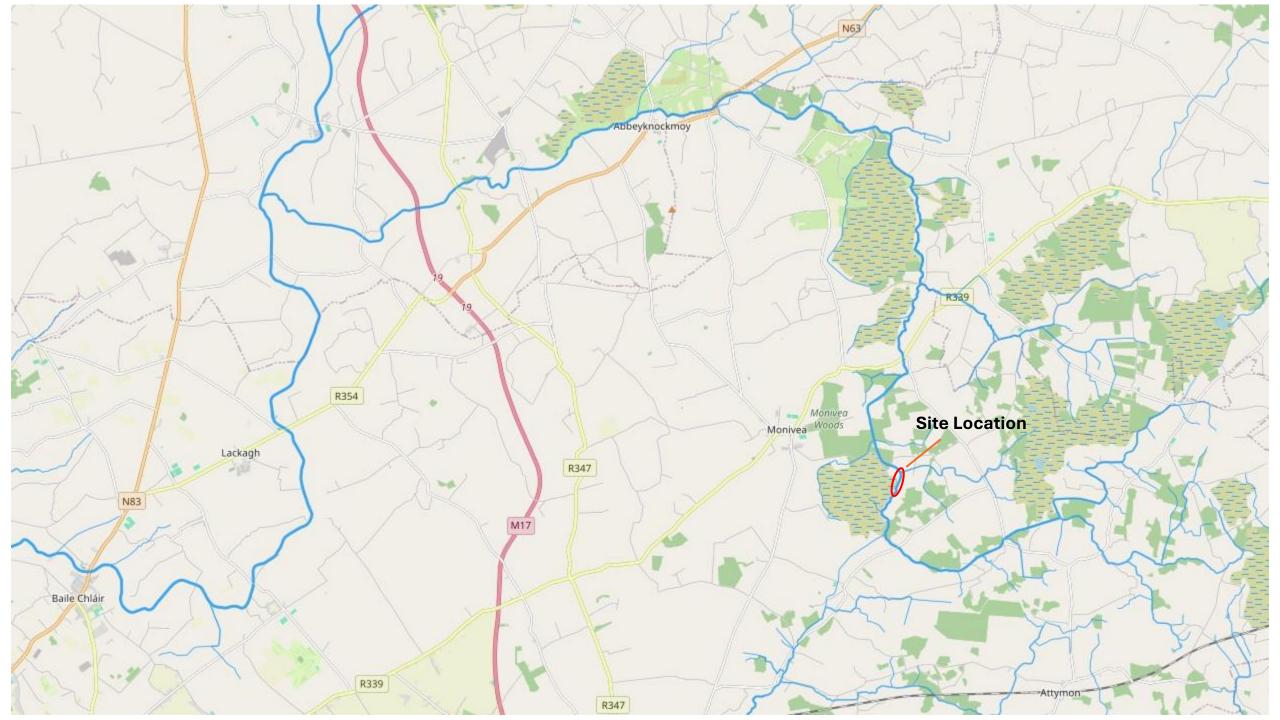
## Riparian Protection & Fisheries Habitat Enhancement on the Abbert/Kilaclogher River - Tiaquinn

The Abbert or Kilaclogher river is among the most important channels for salmonid spawning and nursery in the lough Corrib system. Like most of the rivers in the fertile areas of East Galway, much of its natural structure and fluvial processes have been disrupted and compromised by repeated and ongoing endeavours to expedite the drainage of water from the surrounding landscape.

Streams have been widened, deepened and straightened, resulting in significant losses in habitat structure and heterogeneity. In many places the natural riparian vegetation has been stripped away leaving banksides lacking the protective cover provided by trees. With long term exposure to solar energy for long stretches of river, water temperatures are at risk of exceeding the optimal thermal range for salmonids and growth of aquatic macrophytes and algae is accelerated beyond normal thresholds.

This plan aims to restore some of the structural habitat heterogeneity which has been removed by drainage and provide suitable substrates for salmonid spawning. It also outlines methods for the improved protection of the riparian zone with 230m of fencing, a solar pump and drinking trough.





Poor or no fencing on the left (SW) bank has led to severe poaching of the riparian zone. New fencing for 200m on this bank <u>F</u>ootbridge and a compensatory livestock drinking system is required 10 8 6 5 LENAMORE 4 LENAMORE 3 2 OPW Ch-id 931525 Corrib-Clare Channel 3/8 TIAQUIN DEMESNE



1. Chainage 27670. Place gravel bed (approx. 5T) at tail end of pool 20m downstream from bridge

Gravel bed should be located just upstream of the existing gradient break as shown here

2. Ch 27625: Use timber or stone structures to create a paired deflector at the location shown

Excavate pool  $2 \times 5 \times 1 \text{m}$  downstream from deflector

Place gravel bed (approx. 10T) downstream of pool

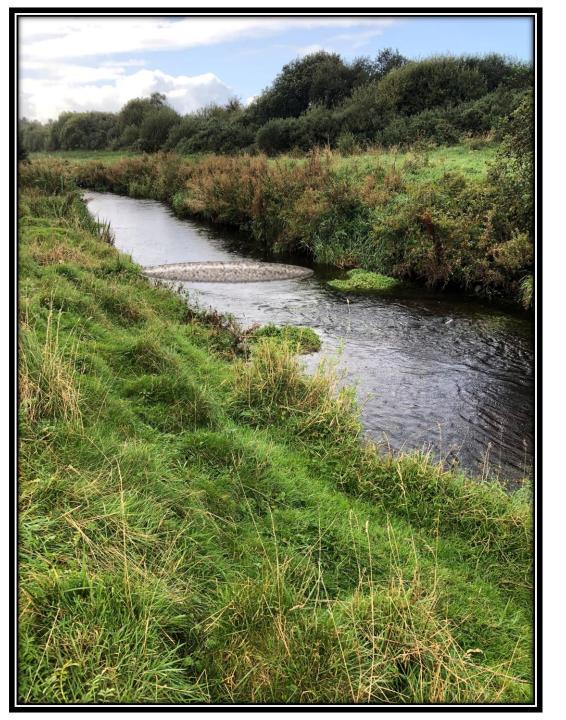


3. Ch 27580 Option to create gravel bed at the location shown, as flow is sufficient to prevent sedimentation by fines

This location is a depositing habitat where the widening of the channel has dissipated river energy resulting the deposition of fine sediment.

Important not to disturb emerging berm to maintain flows over gravel area.



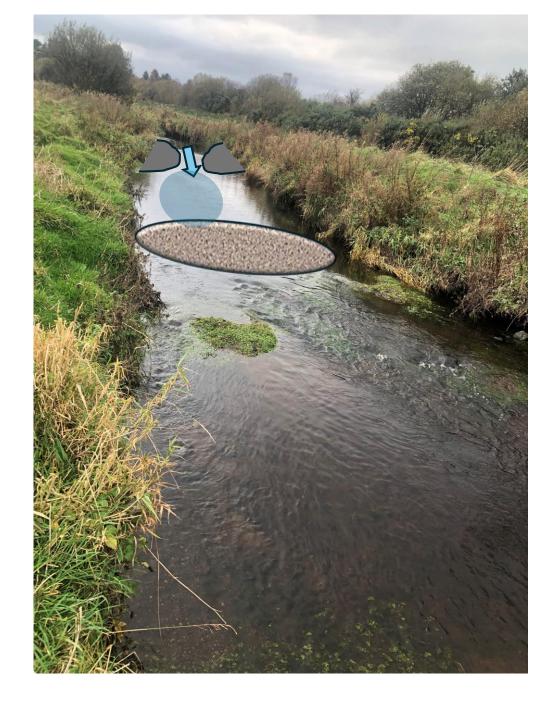


4. Ch 273620 Place gravel bed (approx. 5T) at tail end of existing pool 2-3m upstream of existing gradient break.

5. 27 Use timber or stone structures to create a paired deflector at the location shown.

Excavate pool downstream of this and place a large gravel bed At the downstream end of this.

Gravel bed should be located just upstream of the existing gradient break



6. Ch 27290 Place a gravel bed at the downstream end of this pool.

Gravel bed should be located just upstream of the existing gradient break



7. Ch27195 Place a gravel bed at the downstream end of the pool on bend.

Gravel bed should be located just upstream of the existing gradient break



8. Ch. 27160 Place a large gravel bedt the downstream end of this pool.

Gravel bed should be located just upstream of the existing gradient break where instream vegetation has established



9. Ch 27065 Place large gravel bed 2m upstream of riffle



10. From Ch 27060 - 26905 Construct #5 alternating deflectors to narrow base with, increase flow rate and create thalweg.

Place#5 boulders throughout length of talweg.



11. Ch. 26910 Place large gravel bed upstream of gradient break at last riffle upstream of footbridge Fence entire length of left bank for this stretch. (C. 230m)

#1 drinking trough, solar pump and drinker will be required At this stretch



