

## Right of passage

In October 2010 the Slaney River Trust was informed about a real obstacle in the way of migrating fish up in to their spawning grounds high up in the river Boro system.

The cause of the obstacle was a water extraction weir constructed by the black stairs group water scheme. IFI was contacted and they had already begun the process of ensuring that this weir (see image below) would be provided with adequate fish passage. Unfortunately, due to time constraints, the spawning stock of 2010 had to encounter this concrete wall with no pass provided



No approach path provided for fish . bolder right at base of flow

1.3 m high weir with no means of fish pass provided

This whole area of the demand for water(basic human right) , water extraction and the need to consider the rights of the marine and aquatic creatures living and depending also on the same water as we do for survival is a real issue being encountered all over the country . Even with the cost of energy rapidly increasing

the demand for hydro powered electrical generation is also putting planners and conservationists to the test

Thanks to the work of IFI in summer of 2011 a new fish pass constructed at this location and fish for the spawning season of 2011 were provided with a means of passage which some (including myself) would claim is their right

Below are some images of the this new weir that was installed at considerable expense opening up some kilometres of pristine spawning habitat



Fish pass of about fifteen metres long



Fish pass consists of successive chambers which appear to have no flow over the cut notch but on close inspection there is a 10 inch square opening on the river bed on each chamber wall at the opposite side to the above water line visible notch, basically each chamber fills from below

In stream boulders to encourage migrating smolts through the fish pass as they head down stream

## The base of the fish pass

There have been reports of good numbers of sea trout and salmon passing up through the pass, but not all the fish are being attracted into the base of the pass. Fish are attracted by the velocity and volume of water as they approach any obstacle and will always attempt the path their senses tell them will give them the greatest success, this value is termed as the head of water. Some times in high water there is a distractionary head flowing over the crest of the weir thus resulting in fish attempting to jump the 1.3m high weir with no base pool to even launch themselves from. IFI highlighted their awareness of this problem and are engaged in the design process for its remedy, as with anything in life nothing is perfect and there is always going to be need for improvement

What is great to see is the work that has been carried out to ensure that our finned friends have their rights maintained, well done to all involved



Base of the pass has considerable head (measure of flow) to attract fish, small problems still exist for the larger sea trout and salmon which require greater head of water to be attracted to enter the pass than is currently being created by the flow through the pass