Proposed WRBD Stock Management Plan – 2017

Introduction In accordance with IFI's current policies on both pike and trout, stock management operations are indicated for six lake catchments in the WRBD: Loughs Corrib, Mask, Carra, Conn, Cullin & Arrow all of which are designated managed wild brown trout fisheries. The rationale and plan for these operations on the six lakes and some of their inflowing rivers is set out below.

Gill netting and electrofishing (EF) operations are planned for all six lakes (L. Cullin EF only) and full details of the proposed start and finish dates are tabulated below and include projected costs and projected numbers of pike to be removed.

The operations will be carried out in accordance with IFI's SOPs for both electrofishing and gill netting operations. However, having regard to the MSO ruling on the carrying of water bins in the Pioner EF boat and similar concerns in relation to lake boats used in the netting operations all pike less than 85cm will be euthanised. Should clearance be received during the year to carry appropriately designed water bins then consideration will be given to relocating viable fish to designated pike fisheries subject to appropriate veterinary approvals and stock needs. Should this option become available it will be necessary for the Research Division to identify suitable receiving waters.

All staff handling pike do so in accordance with IFI's SOPs and received fish welfare training in 2016. All euthanised pike carcasses will be appropriately disposed of with an approved rendering company.

It is difficult to estimate the outcome of such operations but the projected numbers of pike to be removed, as advised by very experienced senior personnel, have been included in the tables presented below.

In relation to quantifying the cost of stock management operations in the WRBD, the tables below include the manpower costs based on an analysis of pay rates for the different grades involved averaged out and represents an accurate estimation of the total cost. However, it should be borne in mind that, while the entire pay cost has been attributed to stock management, the staff involved will at the same time effectively be patrolling the lakes, monitoring angling activity, identifying water quality issues, monitoring for aquatic invasives or the spread of existing invasives and effectively maintaining a presence which acts as a deterrent to illegal activity. It should also be noted that regardless of when stock management operations commence and how long they are ongoing, IFI will still incur all of the costs tabulated below the incremental costs for stock management are primarily subsistence and petrol costs and thus are marginal.

Gill Netting Operations

Netting will be concentrated into specific periods on each lake as detailed in the table below ranging from just 3 weeks on Lough Arrow to 5 weeks on Lough Conn and will be completed on all lakes during the period commencing 27 February and ending on 31 March 2017 and will involve a total 455 man days. However, it should be noted that weather and other factors can impact on these operations and it is unlikely that the full periods will be fished on each lake. There will be no netting operations carried out on Lough Cullin. In general, gill nets will be set along the margins of the lakes to intercept pike moving in and out of known spawning / weedy areas. All pike will be handled carefully quickly euthanised and all pike of 85cm or more will be returned immediately subject to these fish being viable. Nets will be serviced daily and will not be set if there are concerns in relation to weather conditions the following day.

Table 1 Details of gill netting operations planned for 2017

Lake	Start	Finish	No days	Man days	Projected no. pike removed	Avg cost per Man Day incl ERPRSI	Pay costs	Sub est.	Transport & fuel	Other costs	Total estimated cost
Arrow	13/03/2017	31/03/2017	15	45	200	143	6435	315	150	100	€7,000
Conn	27/02/2017	31/03/2017	25	100	600	148	14800	701	250	200	€15,951
Cullin	-	-	-	-	-	-	-	-	-	-	
Carra	13/03/2017	07/04/2017	20	60	300	167	10020	420	300	83	€10,823
Mask	27/02/2017	24/03/2017	20	100	400	167	16700	701	250	83	€17,734
Corrib	27/02/2017	24/03/2017	20	150	900	167	25050	1051	400	333	€26,834

Electrofishing Operations

In contrast to netting operations, electrofishing (EF) operations can be carried out year round subject to suitable weather (calm & dry) and water conditions. As such, the period identified for EF operations on each lake is much longer and can effectively run from 1 January to 31 December in any year. In fact, EF operations have commenced as early as January in recent years. In reality, however, the number of days fished over a year will be significantly less than that allocated to gill netting operations. In the case of 2017 a total of 229 man days have been allocated to EF operations over the entire year which is approximately half the days (455) proposed for gill netting over a five week period.

The table below quantifies the planned electrofishing effort on the six lakes and includes the EF operations planned for the lower reaches of a number of rivers identified below.

Table 2 Details of Electrofishing operations planned for 2017

Lake	Start	Finish	No days	Man days	Projected no. pike removed	Avg cost per Man Day incl ERPRSI	Pay costs	Sub	Transport & fuel	Other costs	Total estimated cost
Arrow	01/04/2017	30/09/2017	20	64	240	143	9152	448	340	50	€9,990
Conn	01/02/2017	31/12/2017	6	24	300	148	3552	168	102	80	€3,902
Cullin	01/02/2017	31/12/2017	9	36	300	148	5328	252	153	80	€5,813
Carra	01/01/2017	31/12/2017	5	17	400	167	2839	119	85	50	€3,093
Mask	01/01/2017	31/12/2017	6	18	400	167	3006	126	102	50	€3,284
Corrib	01/01/2017	31/12/2017	24	70	1600	167	11690	490	408	133	€12,721

In addition to targeting the nursery margins, EF will also be used to control predatory pike numbers in the lower reaches of a number of rivers. There is evidence of predation of salmon smolts and trout near and in the estuaries of nursery rivers and streams especially when salmonids are migrating in March and April period. Surveys on Lower Corrib in the past have shown that potentially large numbers of salmon smolts can be cropped by pike on their way to sea. EF operations on some river mouths will also be scheduled for January/February to militate against predation of migrating salmonids. The months of September and October can also be productive as juvenile pike will have reached a size large enough to be seen and picked up. The rivers where these EF operations will be carried out in their lower reaches are tabulated below:

Table 3 Rivers where electrofishing of the lower reaches is planned

Lake Catchment	River
Corrib	Cornamona
	Maam
	Cross
	Black
	Creggs
	Clare
	Woodstock
	Owenriff
	Drimneen
	Owenwee
Mask	Cloon
	Robe
Carra	Annies
Conn	Deel
	Castlehill
Cullin	Manulla/Clydagh
Arrow	Unshin

The main focus of EF operations will be to target juvenile pike in the nursery areas around the margins of the lakes and if one looks at the projected catches for the Great Western Lakes using this technique it is immediately apparent as detailed in the table below:

Table 4 Projected size ranges of pike electrofished form the Great Western Lakes

Lake	No.	Projected size range
Carra	400	(333<15cm & 67 >15<85cm)
Mask	400	(333<15cm & 67 >15<85cm)
Corrib	1600	(1334<15cm & 266 >15<85cm)

Other Areas

Pike have been introduced recently into the Owenriff system (discovered 2008) and the salmonid population has collapsed. It is planned to facilitate pike catch and kill competitions on these lakes

subject to approval to proceed – this type of competition has taken place over the past number of winters. In the event that any catch and kill pike competitions are authorised on the Owenriff system or on any of the other lakes, IFI staff will be obliged to attend to ensure compliance with the conditions of any authorisations issued for such competitions. Based on previous years is anticipated that there will be 18 competitions during 2017 however this is an estimate.