



Inland Fisheries Ireland

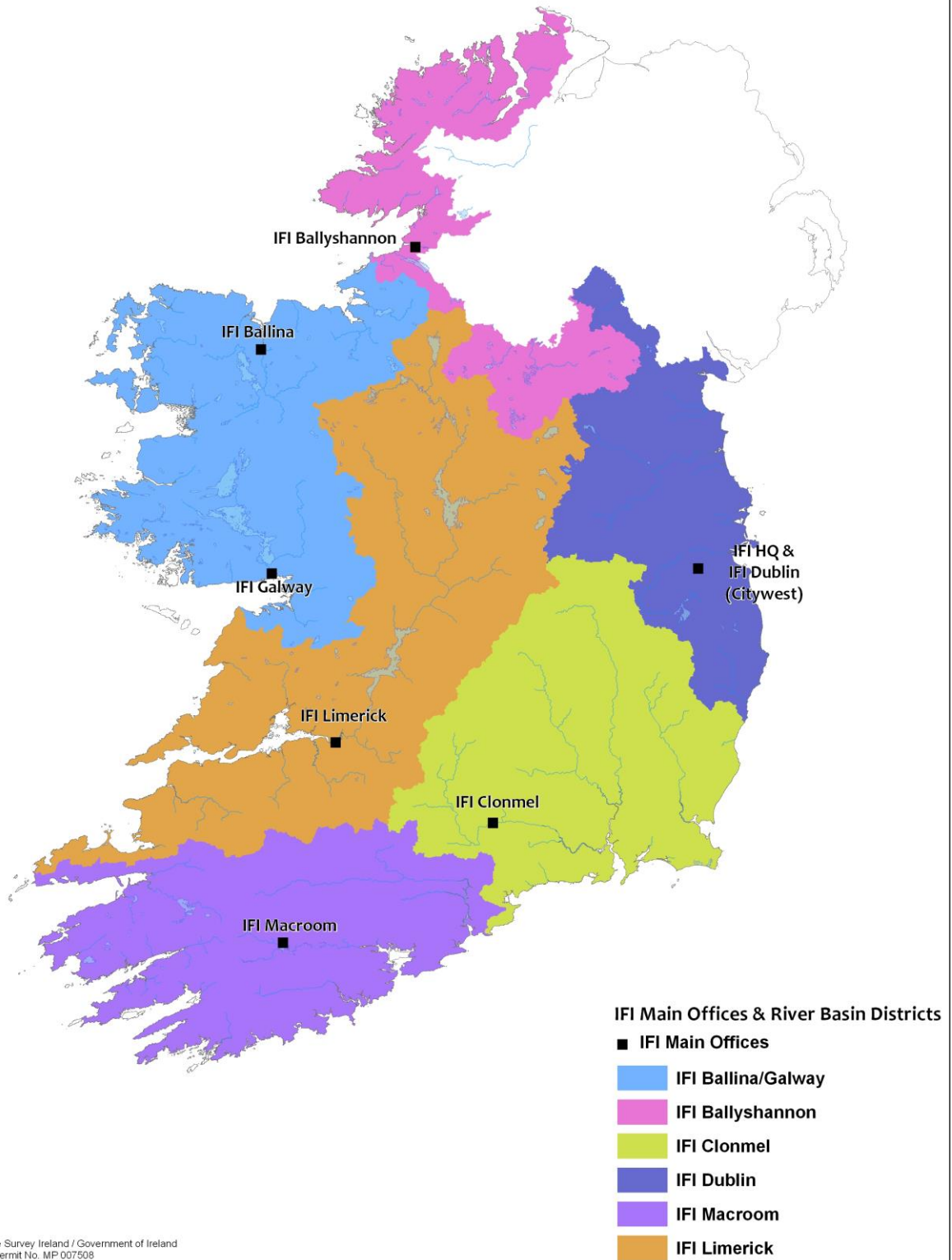
**Consolidated Fish Counter Summary Report
2015**

IFI/2016/1-4327



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MANAGE
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Inland Fisheries Ireland





Foreword

Since Inland Fisheries Ireland (IFI) came into existence IFI has commenced the task of consolidating all counters and counter data under the one branch of the organisation. In addition a substantial effort has been made to address the shortcomings of the old counter network.

In 2015 works were undertaken on a number of counters which included the upgrading of elements such as cabling, replacement cameras and counter circuit boards. The Fergus and Inagh (Ennistymon) counters were upgraded to include camera verification and two additional counter projects are now at planning stage. The number of repairs required during the year was significantly less than previous years. This was as a result of the increased ability of the operators to undertake certain repair works themselves and regular maintenance of the sites.

A number of counters which are operated by Inland Fisheries Ireland and installed with a private project partner are not included in this report. This is in line with IFI Fish Counter Data Policy which requires IFI not to publish the data where the project partner does not consent to the release of such data to the general public.

Over the coming year (2016) IFI will continue to refine and extend its expertise on salmon and sea trout counters and identify new priority rivers for counter installation in conjunction with the Research Division of IFI and the Standing Scientific Committee for Salmon (SSCS). IFI will then commence the process of assessing these rivers for suitable potential sites.

Gregory Forde

Head of Operations



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Introduction

The following report is a brief look at each of the counters operated by IFI. Information for the report has been gathered over the year by staff operating; maintaining and cleaning counters to ensure accurate counts are available. The data gathered annually is put in context when it is compared to data from previous years. When reviewing data in this context it is possible to understand the importance of consistent counts of fish to add to the cumulative dataset for each river year on year.

During 2015 the number of counters which did not provide continuous counts was insignificant as temporary counters were dispatched to cover the sites during repairs. A number of counters were switched off to protect them from severe flooding and electrical storms. These counters sites do not have a run of fish in December so data loss is insignificant. The down time on all counter sites for the remainder of the year has decreased as new solutions are found and spares have been purchased and dispatched accordingly. A number of spare counters are located regionally to reduce the time it takes to get a replacement counter to a site which requires repairs. The inclusion of a reporting and maintenance record section on the new web site which automatically contacts those responsible for repairs and the Head of Operations ensures a quick response time. The web site has enabled IFI to achieve consistence practice on all sites by numerous staff uploading the data. IFI have developed a policy, governing data collected by its network of counters. The policy sets out the rules regarding the storage, management and sharing of fish counter data.

1 River Fane



Type : Logie

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

1.1 River site and description

The fish counter is sited at Stephenstown, on the Dundalk to Ardee road. It is a Logie, resistivity, counter with two channels covering the width of the River Fane. The counter is managed by IFI staff from the Dundalk District. The data is downloaded and verified on the computer system which is housed in the Dundalk Salmon Anglers hatchery facility near the weir.

1.2 Operation

The counter worked well during the year with maintenance being carried out regularly. The counter performed well on this weir as the connections on the weir were upgraded and sealed. New camera cable was laid to upgrade the old cable. The new cable will allow staff operating the site to change cameras on the weir if necessary. The counter provided good data for 2015. There counter was working in December but the accuracy of the counts were limited by extreme flooding – which was apparent throughout the country not just in the Fane catchment.



Table 01: Counter data for the R. Fane

Fish Species	Number
Spring salmon	12
Grilse	80
Late Summer Salmon	79
Sea Trout	275
Lamprey/Other	0

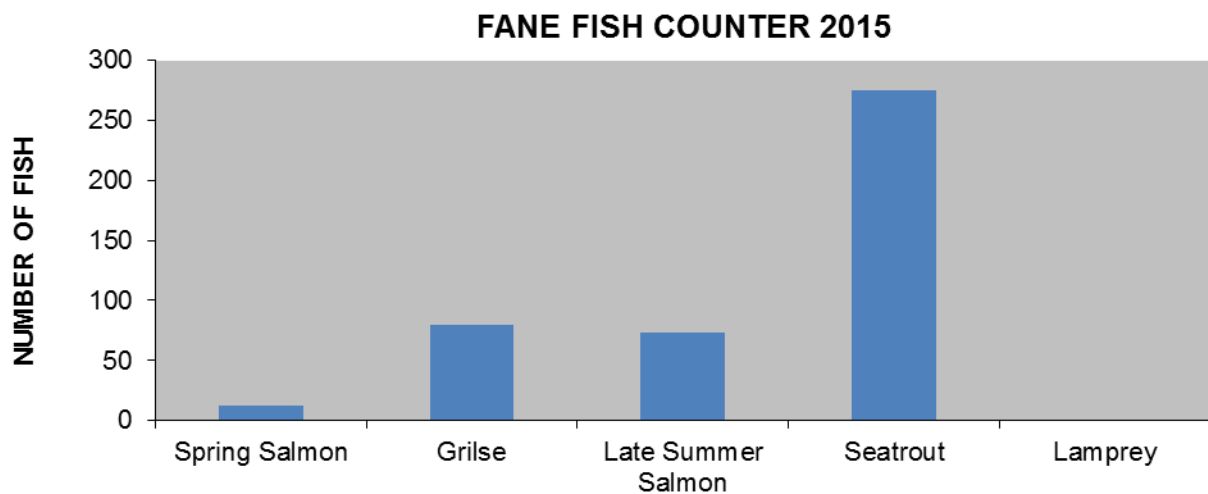
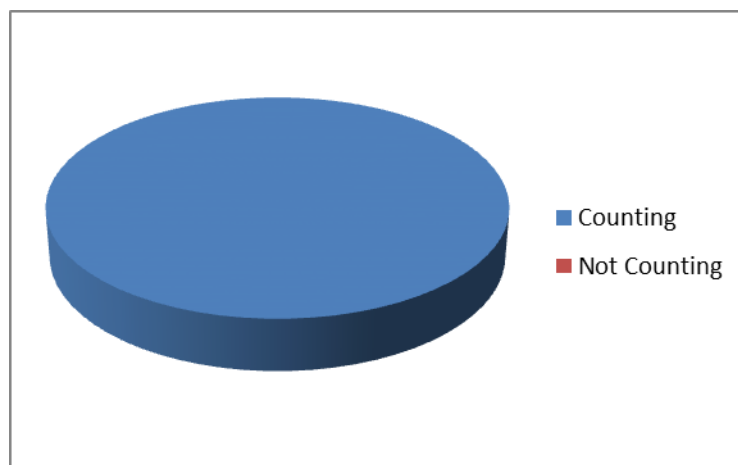


Table 02: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



2 River Dee



Type : Vaki

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

2.1 River site and description

The fish counter is sited at Cappogue, on Drumcar Weir, on the Drumcar to Dunleer road, County Louth. It is a Vaki counter and records the fish as they move up and down through the fish pass on the side of the weir. This counter is a partial counter and the percentage of the fish counted depends on weather and water level. This data is uploaded by IFI staff from the Dundalk District. The data is verified on site using the Winari software.

2.2 Operation

The Vaki counter had an improved performance in 2015 on the previous year operating with minimal disruptions. The counter had some repairs carried out during the year. The cables to the CPU box were again damaged due to flooding and debris. These were repaired and the counter worked well. The Vaki is an older model and parts are difficult to source but to date it has counted fish travelling upstream successfully.



Table 03: Counter data for the R. Dee

Fish Species	Number
Spring salmon	05
Grilse	0
Late Summer Salmon	119
Sea Trout	235
Lamprey/Other	0

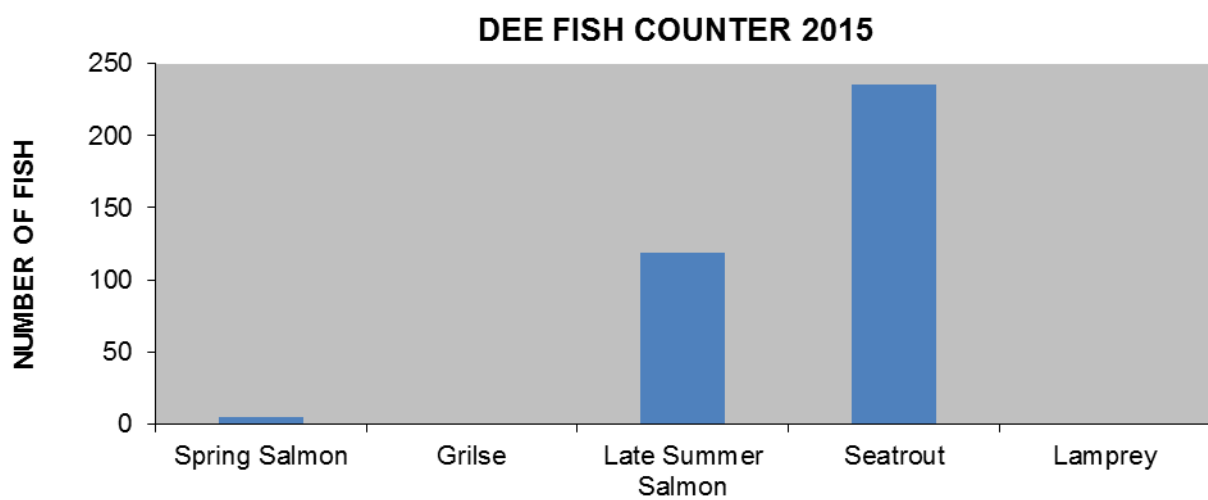
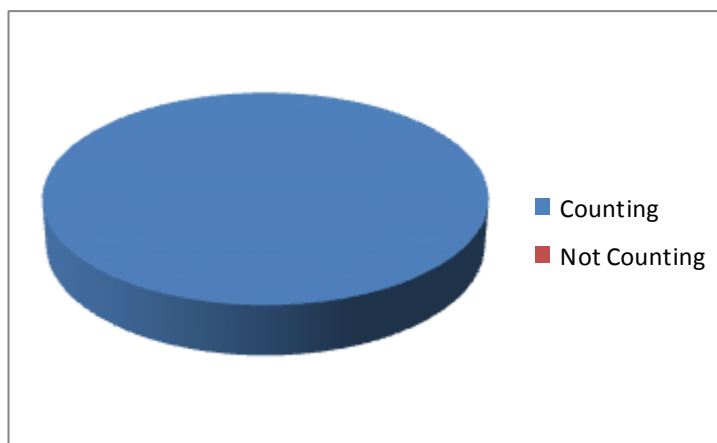


Table 04: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



3 River Boyne



Counter type: Logie and Vaki

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

3.1 River site and description

The Fish counters at Blackcastle in Navan, Co. Meath consist of 6 different channels which count fish travelling up and down the River Boyne system. These are made up of 4 crump weirs which record fish as they pass over the weir and two Vaki counters that count fish as they pass through two tunnels on either side of the crump weirs. The counters account for approximately 20% of the total width of the channel at Blackcastle. The weir at Blackcastle makes up the remaining 80%.

3.2 Operation

The counters give an accurate total of the fish that travel through them; the amount of fish that cross up and down across Blackcastle Weir is unknown. This counter provides a partial count but counts a high percentage of the run of fish. Repairs to the system were confined to replacing cameras and camera cable. All the counters on this site worked well for the period. The counter site experienced severe flooding in December.



Table 05: Counter data for the R. Boyne

Fish Species	Number
Spring salmon	213
Grilse	456
Late Summer Salmon	862
Sea Trout	0
Lamprey/Other	0

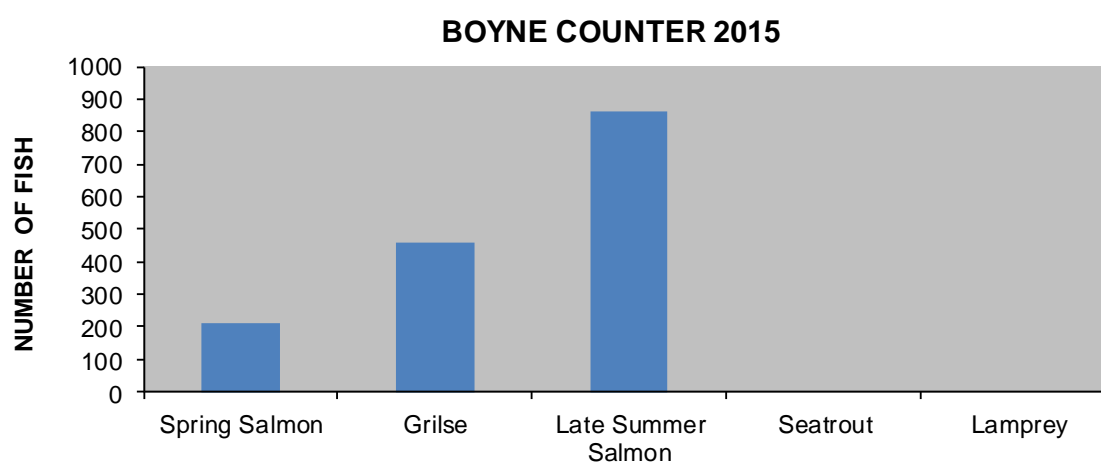
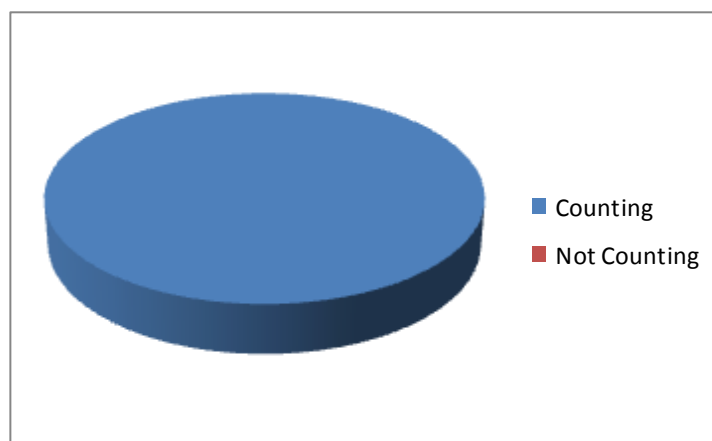


Table 06: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



4 River Slaney



Counter Type: Logie

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

4.1 River site and description

The system used on the Slaney is a Logie fish counter in conjunction with a tube fish pass that counts salmon and sea trout which enter the tube on their return to the river from the sea. An underwater surveillance camera is used to verify the fish count recorded on the counter. The site of the counter at Clohamon weir is approximately 30 miles from where the Slaney enters the sea through Wexford Harbour. The counter provides a partial count as fish can traverse the weir in flood conditions.

4.2 Operation

The counter is both efficient and accurate in terms of the fish that actually move upstream or downstream through the tube, but an unknown proportion of the run by-passes the counter at other points on the weir. The counter system worked well, the ducting to the weir which had been damaged has been upgraded and this should avoid any damage in the future. Constant maintenance and cleaning has ensured the data is consistent and any inaccuracies detected. The counter site experienced some flood damage during December but the counter remained working.



Table 07: Counter data for the R. Slaney

Fish Species	Number
Spring salmon	160
Grilse	133
Late Summer Salmon	234
Sea Trout	68
Lamprey/Other	0

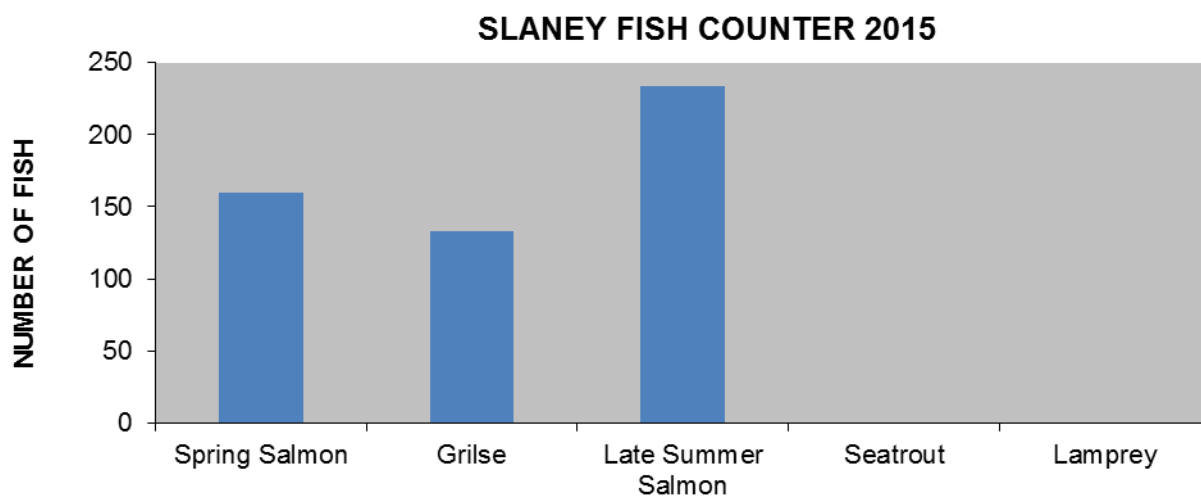
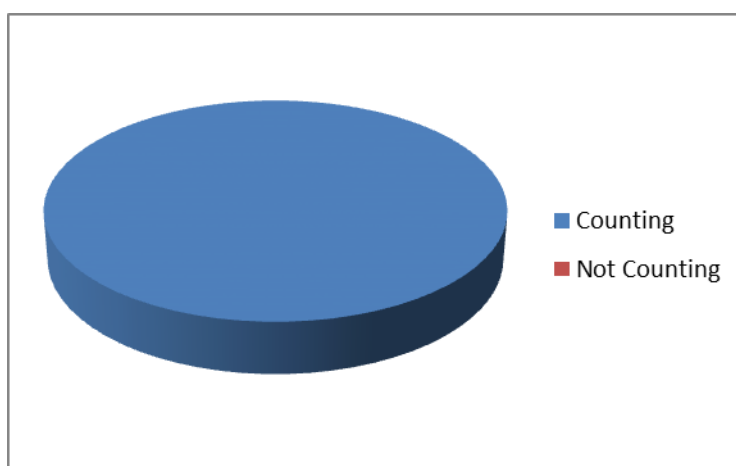


Table 08: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



5 Kerry Blackwater River



Type : Logie

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

5.1 River site and description

The Kerry Blackwater counter is located one hundred meters upstream of the river estuary. It is a Logie restivity counter which operates over three channels and gives a total count for the river. The river is currently open for angling on a catch and release basis. The river is sixteen miles long with one small lake and is considered a spate river.

5.2 Operation

The counter operated well during the year. A new counter was installed in 2013 and the system has operated well since. The site has been checked regularly and the system assessed due to the low numbers of fish being recorded crossing the weir. However the low numbers of fish recorded by the counter is consistent with angling reports for the river. The counter is providing accurate results for the river system.



Table 09: Counter data for the Kerry Blackwater River

Fish Species	Number
Spring salmon	43
Grilse	115
Late Summer Salmon	01
Sea Trout	27
Lamprey/Other	0

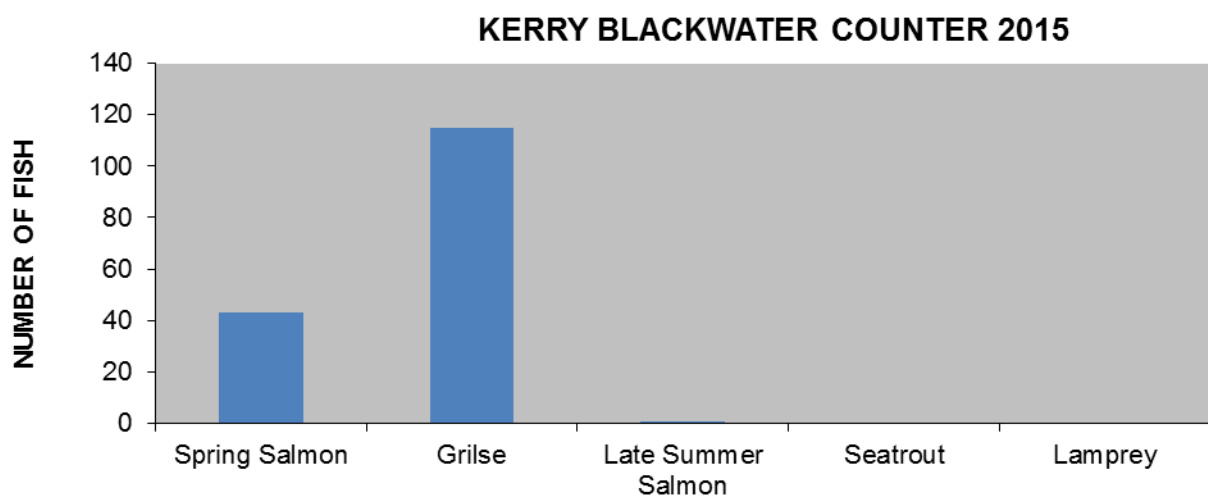
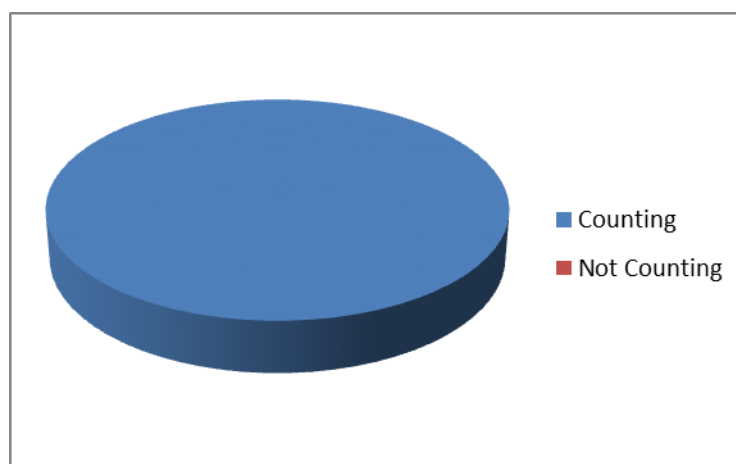


Table 10: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



6 Waterville River



Type : Logie

Operating: Jan –Dec 2015

Performance: Good

Verified: Yes

6.1 River site and description

The Waterville counter is located upstream of the estuary in the estate grounds of Waterville house. The counter is a logie restivity counter which operates four counting crumps giving a total count for the river system. The electrodes are spaced primarily for counting sea trout. The data to date has been verified by CCTV camera.

6.2 Operation

The counter has operated well over the course of the year and has had no disruptions – this is in contrast to previous years when there were a number of outages. The connections to the counter have been replaced to upgrade the quality of data being collected. The computer which operates the Geovision surveillance camera has also been replaced. Three additional cameras were added in 2014 to facilitate a more extensive verification process. The cabling to three of the cameras has since been found to have defective connectors and will be replaced early in 2016.



Table 11: Counter data for the Kerry Blackwater River

Fish Species	Number
Spring salmon	73
Grilse	180
Late Summer Salmon	92
Sea Trout	5161
Lamprey/Other	0

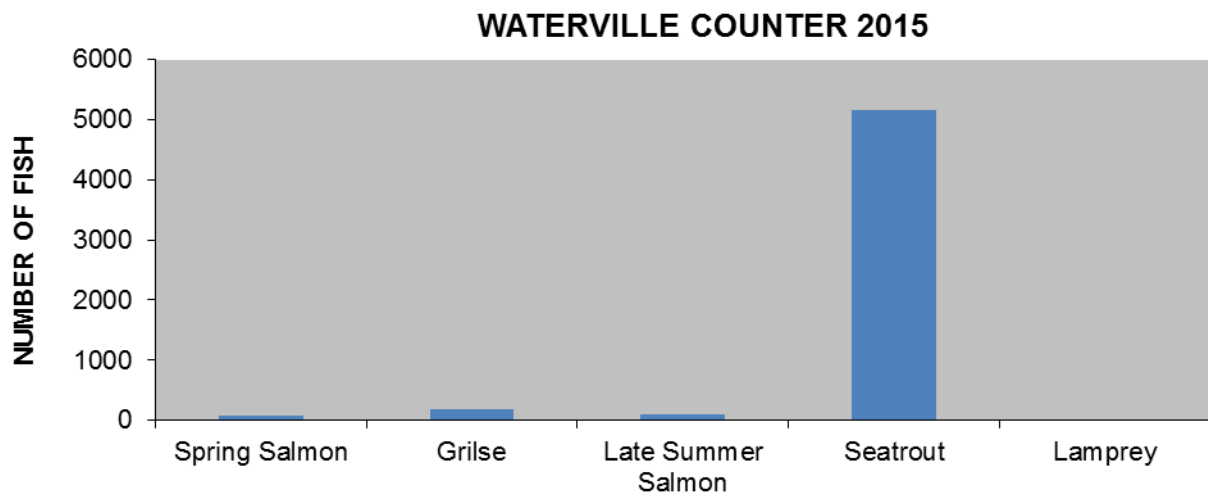
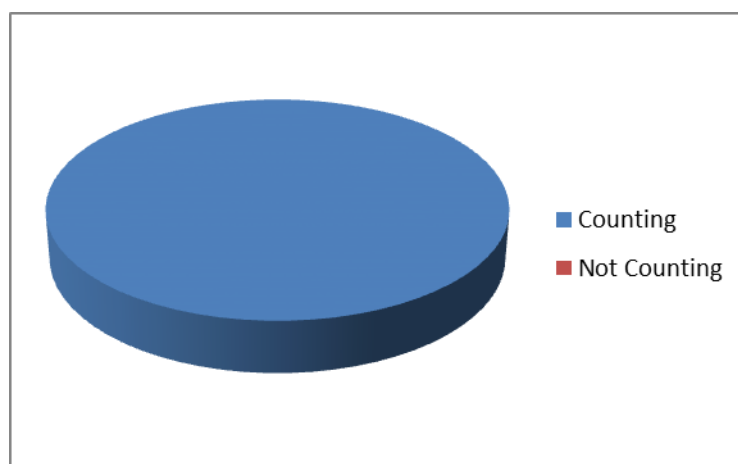


Table 12: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



7 River Maine



Type : Logie

Operating: Jan –Dec 2015

Performance: Good

Verified: Yes

7.1 River site and description

The fish counter on the Maine is a logie restivity counter operating four channels which span the river giving a total count. The counter weir is located upstream of “Marshell’s bridge” and was commissioned in late 2009. The counter site is six miles from the sea but only half a mile upstream of the intertidal zone.

7.2 Operation

The counter has operated well for the 2015 season as a result of the completion of upgrades to the connections. The counter was checked and tested a number of times over the summer and is providing reliable data, new cameras have also been installed. Significant debris crossing and getting lodged on the weir has caused an increase in the number of events being recorded. The construction of the weir, which has precast crumps, has started to subside causing water to escape under the electrodes. This adds to the number of events being recorded.



Table 13: Counter data for the Maine River

Fish Species	Number
Spring salmon	374
Grilse	685
Late Summer Salmon	449
Sea Trout	140
Lamprey/Other	0

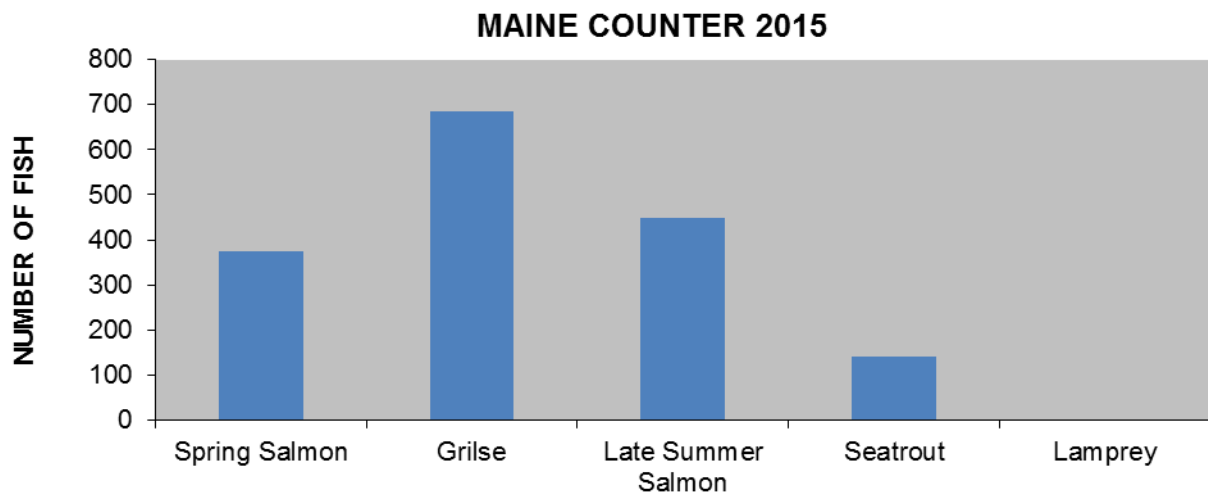
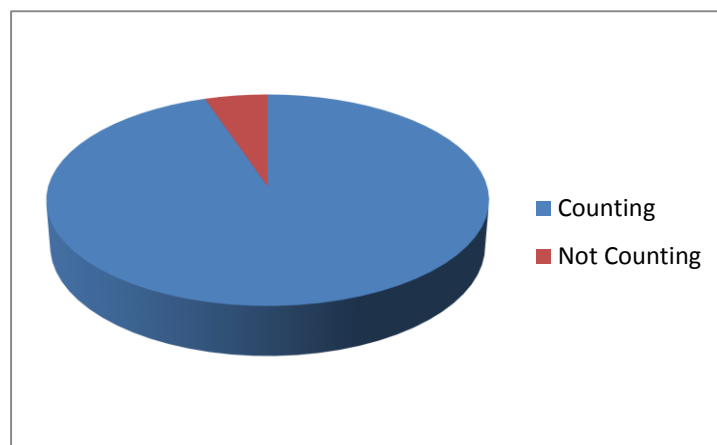


Table 14: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
346	19



8 River Feale



Counter type: Logie

Operating: Jan-Dec 2015

Performance: V. Good

Verified: Yes

8.1 River site and description

The River Feale rises in the Mullaghareirk Mountains in County Cork and meanders approximately 74 kilometres before joining with the Galey and Bricks Rivers becoming the Cashen River. The River Feale counter is located approximately 5 kilometres downstream of Listowel Town in the townland of Scartleigh at the Kerry County Council water abstraction plant. The River Feale is above its conservation limit and is therefore open for angling.

8.2 Operation

The counter is a one channel counter operated on a crump which was installed to assist fish over the large weir. The counter operated well over the course of the summer. This counter provides consistent accurate data. A new camera was installed early in the summer. A small number of fish have been seen by-passing the counter by going over the weir in high water conditions. The counter needs attention in the coming years to ensure it continues to provide accurate information. This counter is set up to count salmon.



Table 15: Counter data for the Feale River

Fish Species	Number
Spring salmon	1153
Grilse	1385
Late Summer Salmon	339
Sea Trout	83
Lamprey/Other	0

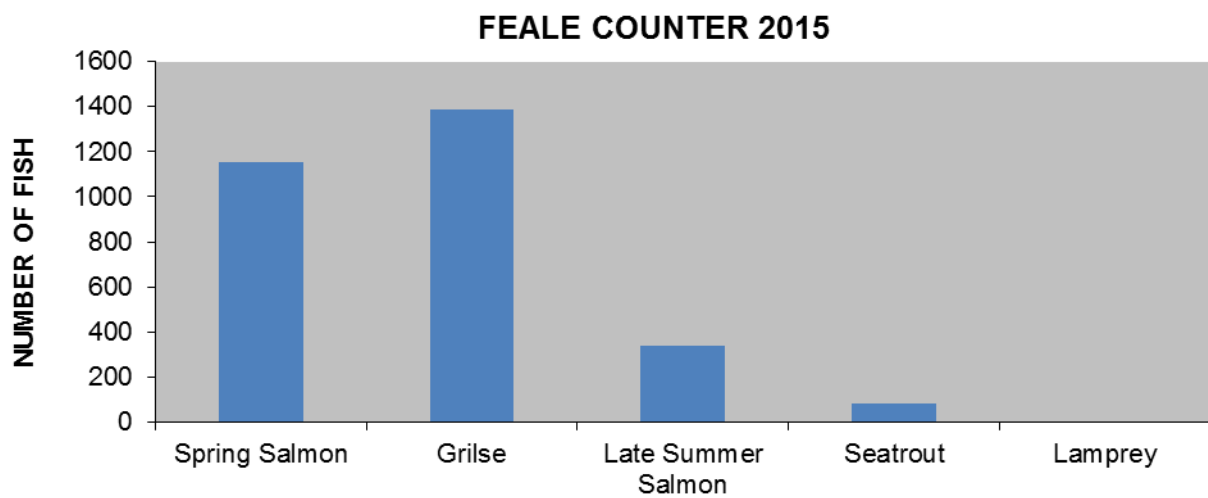
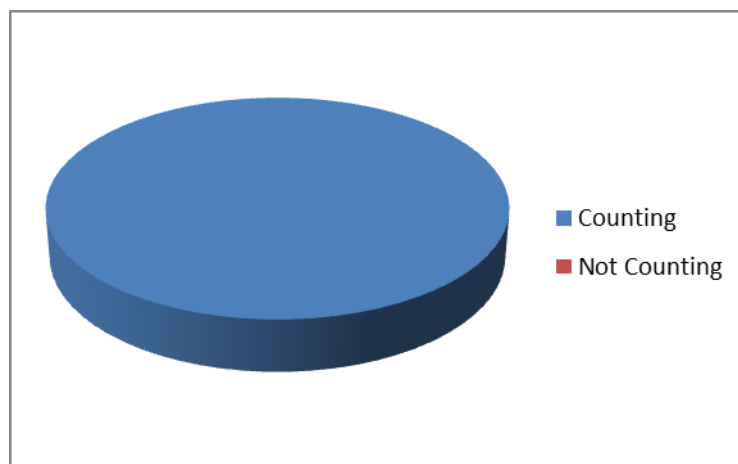


Table 16: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



9 River Maigue



Counter type: Logie

Operation Period: Jan – Dec 2015

Performance: Good

Verified: Yes

9.1 River site and description

The River Maigue rises at the base of the Ballyhoura and Slievenamuck Mountains in the Galtee Mountain range in south County Limerick. It drains a large catchment area of 1,009km² extending from Ballylanders and Kilfinnane in the Southeast, flowing Northwest through the villages of Croom and Adare then turning north into the Shannon estuary at the Ferry Bridge, not far from Kildimo village. The River Maigue catchment area is characterised predominantly by rich pasture land and forms part of the renowned 'Golden Vale' agricultural area.

9.2 Operation

The Maigue counter is a ten channel counter. The counter was completed on March 2013 and is a re-engineered crescent shaped weir. The site uses three counters to count all ten channels and therefore requires a greater amount of time to maintain and verify. The counters have operated well with no break downs and the numbers of events have been reduced to visible debris passing or hanging on the weir. Events were a problem due to the high conductivity of the water.



Table 17: Counter data for the Maigue River

Fish Species	Number
Spring salmon	184
Grilse	708
Late Summer Salmon	326
Sea Trout	0
Lamprey/Other	0

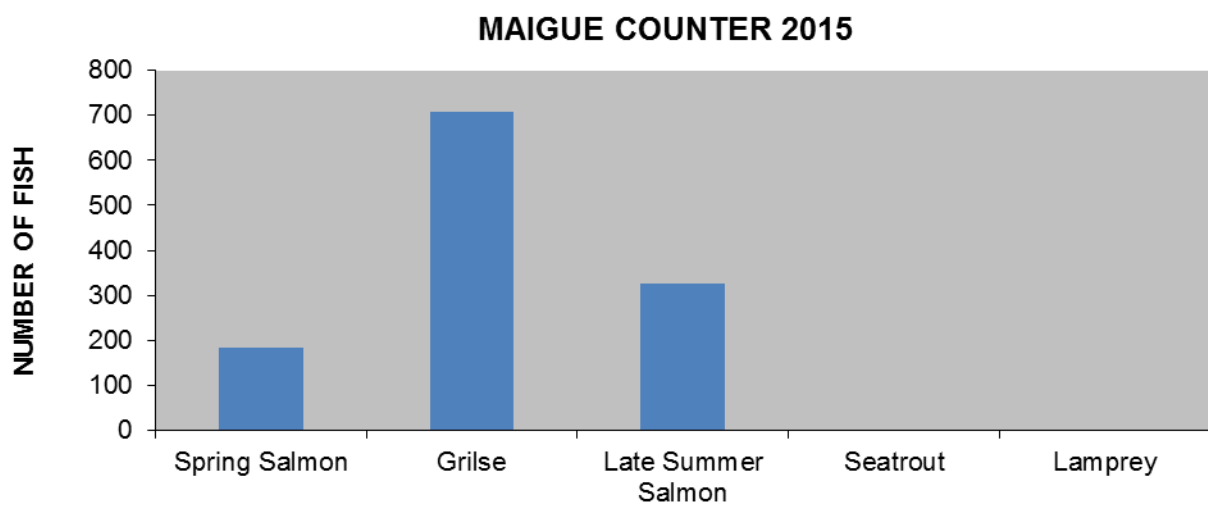
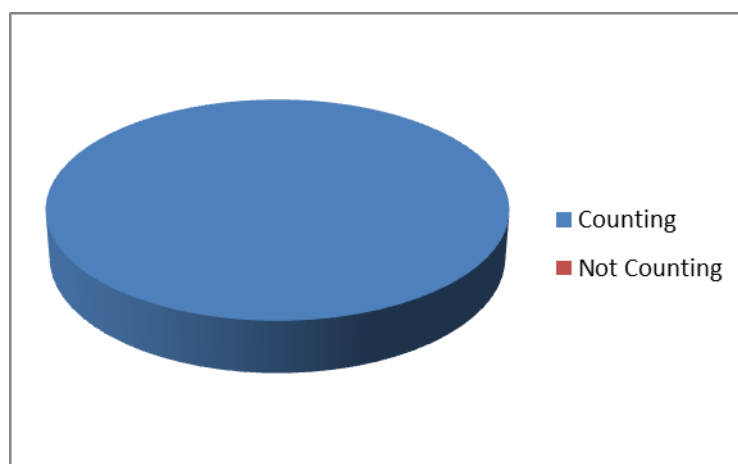


Table 18: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



10 Mulkear River



Counter type: Logie

Operating: Jan-Dec 2015

Performance: Good

Verified: Yes

10.1 River site and description

The Mulkear counter is located at Ballyclough on a purpose built crump weir approximately 3 kilometres upstream from where the mouth of the Mulkear River enters the River Shannon. Due to a large road scheme crossing the Mulkear River in 2004 an agreement was reached with the contractors to install a three channel crump weir and counter underneath the main bypass bridge located upstream of Annacotty village, also included in the plans was a side channel for eel passage.

10.2 Operation

The counter worked well and provided accurate counts for the river. All three crumps were operational and only minimal maintenance was required to keep this counter working. A significant number of Lamprey were observed on camera crossing the weir. A total count for lamprey crossing the counter was extracted during the verification process for salmon this year. The data for lamprey is unverified as it requires significant analysis which is currently underway.



Table 19: Counter data for the Mulkear River

Fish Species	Number
Spring salmon	457
Grilse	1067
Late Summer Salmon	936
Sea Trout	0
Lamprey/Other	382

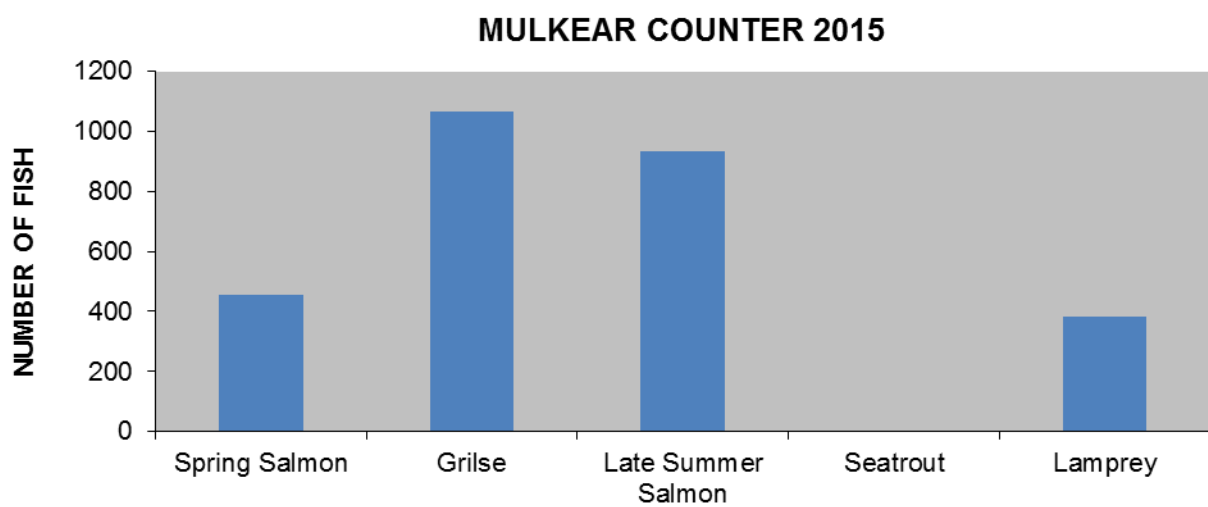
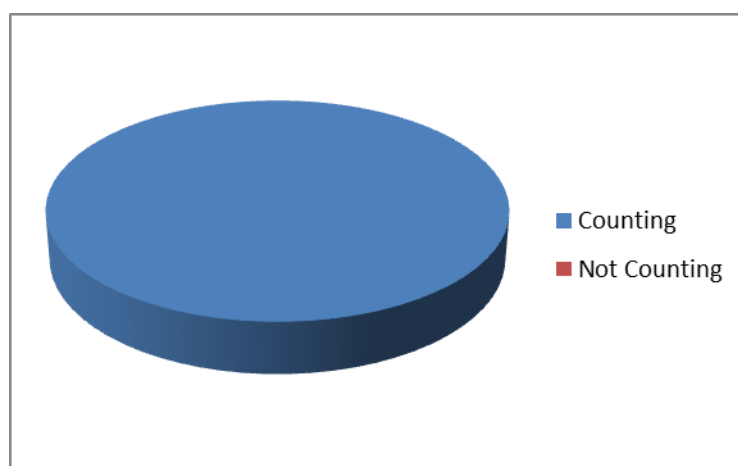


Table 20: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



11 River Fergus



Counter type: Logie

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

11.1 River site and description

The Fergus fish counter is a recent addition to the IFI fish counter programme. The counter was installed as part of the flood relief works in Ennis. It consists of one channel located at the top of the new fish pass. The design of the fish pass is unique to allow lamprey, elvers and salmonids to migrate upstream past the old weir structure which is protected.

11.2 Operation

This year the counter has been rehoused in the Civic building adjacent to the river. This facilitated an upgrade to the site which includes cameras, computer and verification software which has greatly increased the capabilities of the facility. As the work was completed early in 2015 the site has provided data for the main run of fish and has allowed IFI to assess the new fish pass for the first time. Lamprey have not been detected on the counter.



Table 21: Counter data for the Fergus River

Fish Species	Number
Spring salmon	25
Grilse	305
Late Summer Salmon	234
Sea Trout	0
Lamprey/Other	0

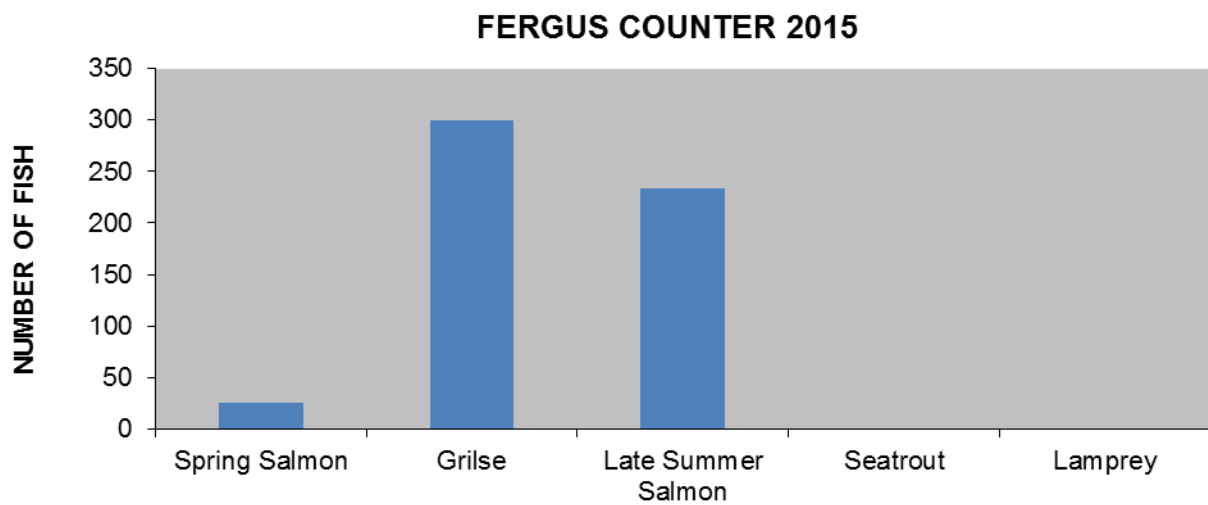
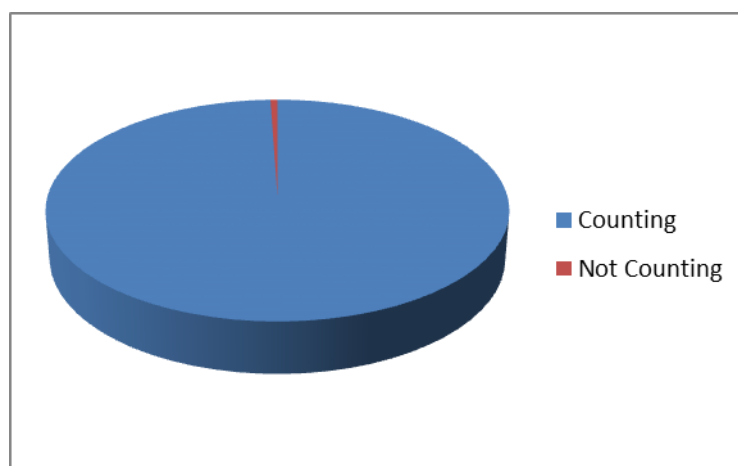


Table 22: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
362	03



12 Inagh River (Ennistymon)



Counter type: Logie tube

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

12.1 River site and description

The tube counter in Ennistymon on the Inagh River has been re-installed after nearly fifty years. This site at the top of the fish pass was the original site of the fish counter which was also a Logie tube counter. The current installation has CCTV verification since early January 2015. The counter hut is in a new location and is only accessible to IFI staff.

12.2 Operation

The counter was connected in late December 2014. The counter has performed well during the year. The site has had a number of issues all relating to issues with cameras and the computer. The counter has worked well and provided counts consistently. This site is now providing year round verified data. Historical data from the early 1950's is available but is more interesting than useful.



Table 23: Counter data for the Inagh (Ennistymon) River

Fish Species	Number
Spring salmon	13
Grilse	09
Late Summer Salmon	211
Sea Trout	15
Lamprey/Other	0

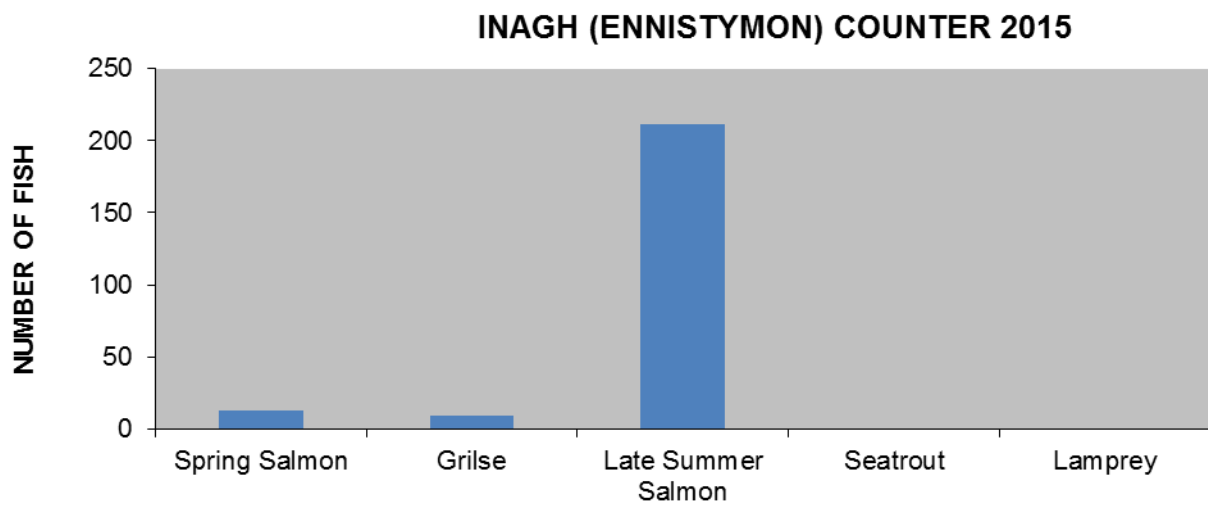
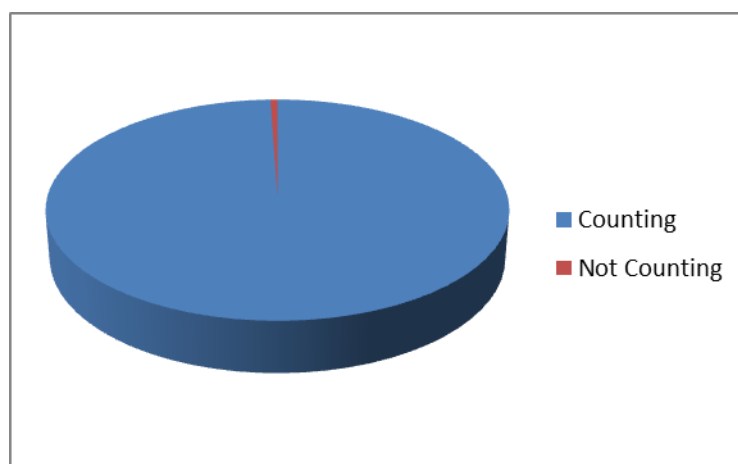


Table 24: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
363	02



13 Dunkellin River



Counter type: Logie

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

13.1 River site and description

The Dunkellin counter was installed early in 2010 and operational from June of that year. The counter is located upstream of the village of Kilcolgan. The counter is a three channel counter which operates well in medium and low water. This entire area is subject to extensive flooding this can lead to the weir being inundated for significant periods particularly during the winter.

13.2 Operation

The counter and Geovision systems are working well. The wet summer caused problems for the counter as it floods out very quickly due to the low gradient in the river. The fish counting equipment was well maintained and continues to work well when conditions are suitable. The data gathered from the counter would suggest that the fish run later in the year. This site was completely inaccessible during the December floods.



Table 25: Counter data for the Dunkellin River

Fish Species	Number
Spring salmon	0
Grilse	18
Late Summer Salmon	71
Sea Trout	0
Lamprey/Other	0

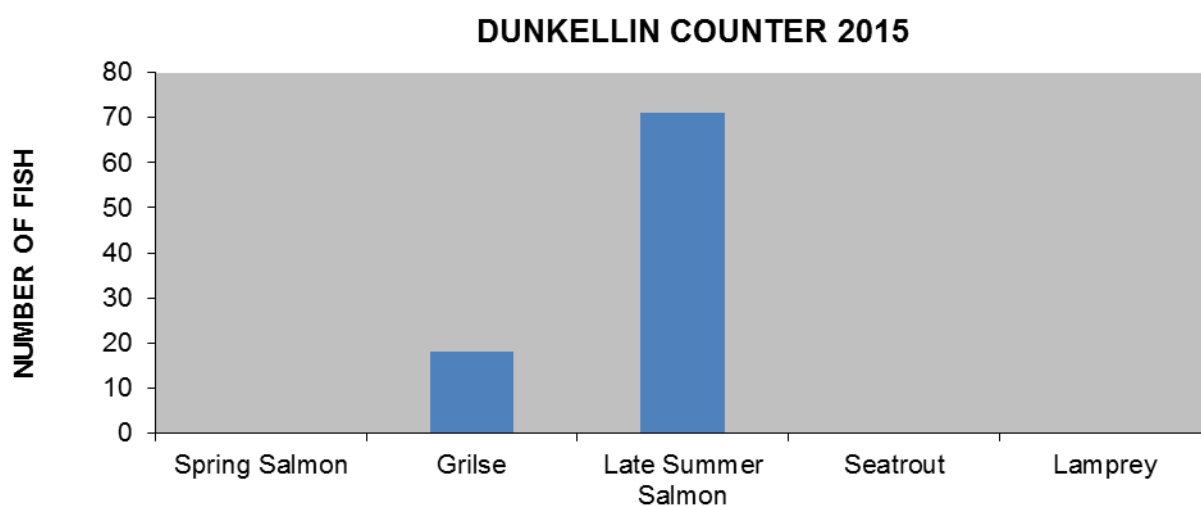
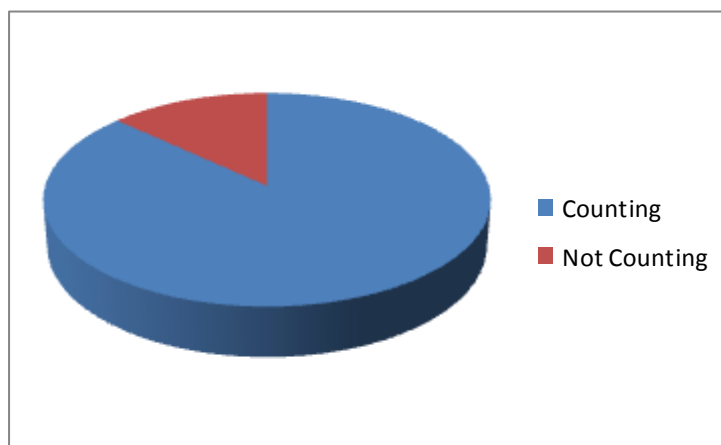


Table 26: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
317	48



14 Corrib River



Type : Logie

Operating: Jan – Dec 2015

Performance: V. Good

Verified: Yes

14.1 River site and description

The Corrib counter is situated in a fish pass at the Salmon Weir in Galway. The system uses is a Logie fish counter in conjunction with a tube fish pass that counts salmon which enter the tube on their return to the river from the sea. An underwater surveillance camera is used to verify the fish count recorded on the counter. Water levels invariably have an impact on the number of fish using the pass as salmon may, in high water, run upstream through opened gates. This is a partial counter as it only counts fish ascending the river through the fish pass.

14.2 Counter operation

The counter operated well during the 2015 season. The counter data has been verified and is accurate. In the late summer months a large percentage of fish entered the system without being counted due to the high water which allowed the fish access the river without having to use the fish pass.

Table 27: Counter data for the Corrib River

Fish Species	Number
Spring salmon	486
Grilse	8970
Late Summer Salmon	20
Sea Trout	06
Lamprey/Other	05

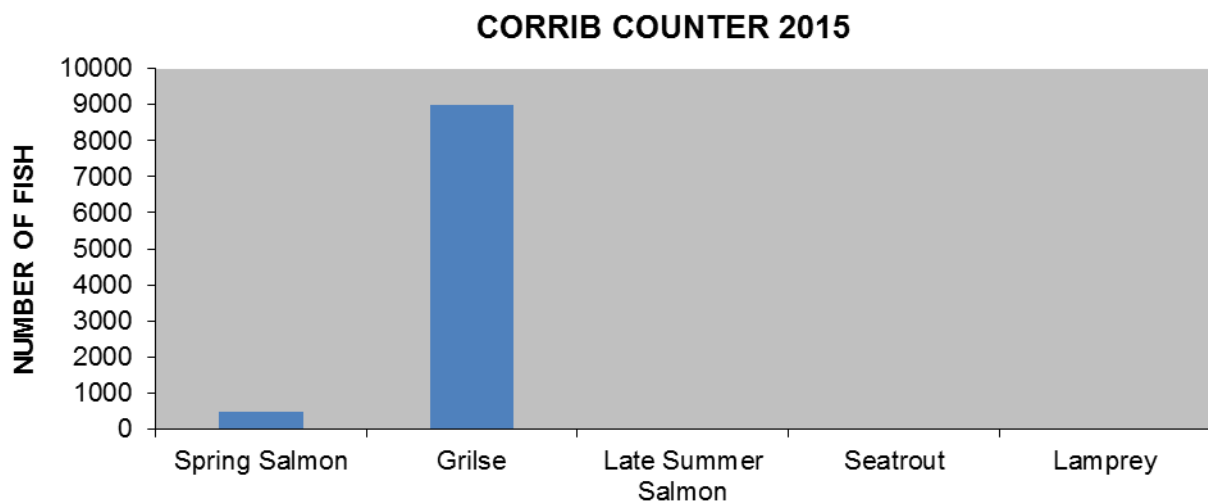
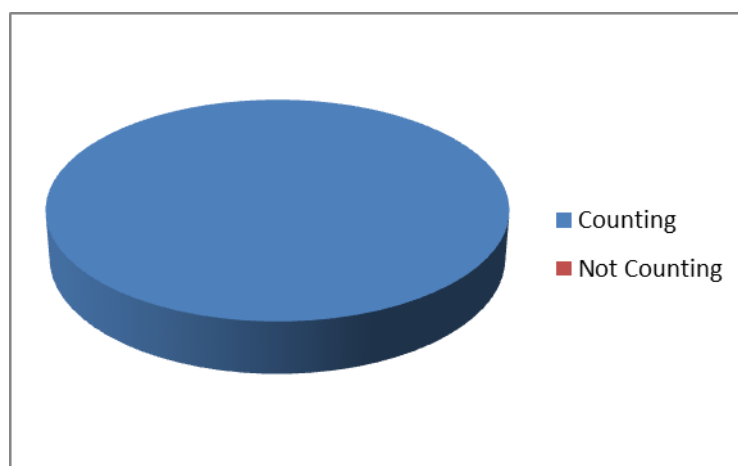


Table 28: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



15 Owenboliska River



Type : Logie

Operating: Jan – Dec 2015

Performance: V.Good

Verified: Yes

15.1 River site and description

The counter is situated downstream of the village of Spiddal. The counter was constructed and commissioned by IFI in 2011 and was funded through the Salmon Conservation Fund. The counter operates on a purpose built weir with one counting channel. A verification camera system is also in operation.

15.2 Counter operation

The counter has been operational for the entire season with no problems recorded. The counter and camera has provided unexpected results with greater numbers of salmon and sea trout migrating up the system than was anticipated. This year will be the third full year of data recorded for the system.



Table 29: Counter data for the Owenboliska River

Fish Species	Number
Spring salmon	49
Grilse	128
Late Summer Salmon	10
Sea Trout	0
Lamprey/Other	0

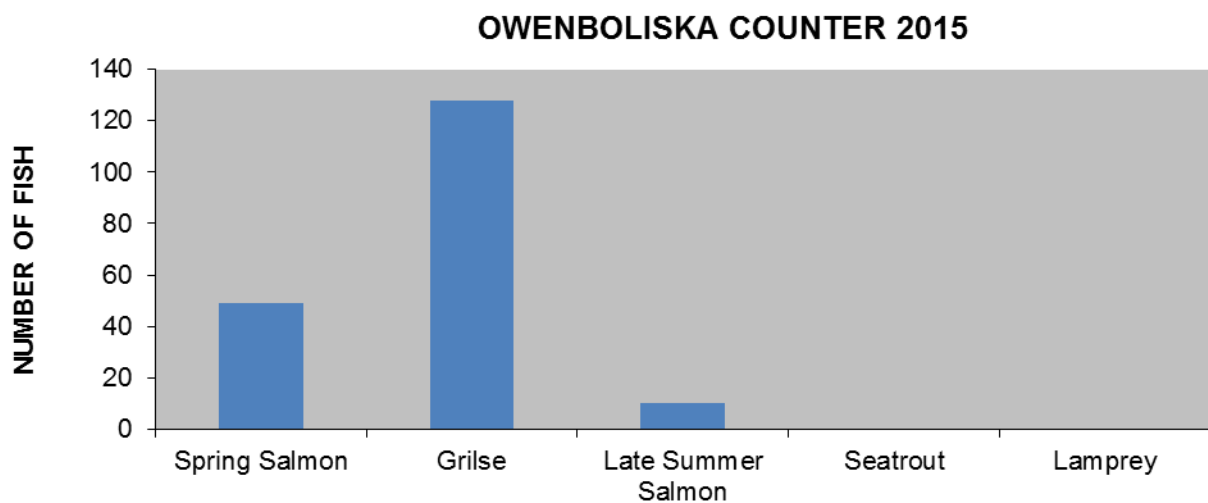
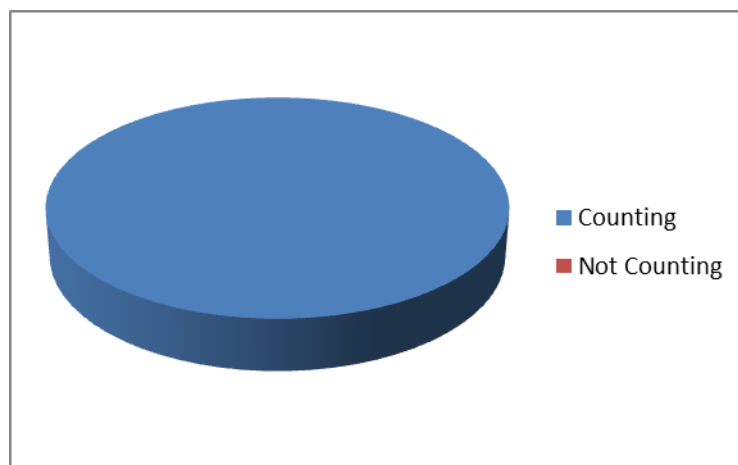


Table 30: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



16 Casla River



Type : Logie

Operating: Jan – Dec 2015

Performance: V. Good

Verified: Yes

16.1 River site and description

The Casla River is privately owned and is the main river of the Costello and Fermoy Fishery. The river is six kilometres in length and drains an area of 83km² which includes 22 lakes – it is a typical sea trout system. The counter is located at a crump weir situated close to the limits of tidal influence. Under most flow conditions fish will run up over the weir.

16.2 Operation

The counter operated very well throughout 2015. The only concern is the counter hut which needs to be upgraded. The counter functioned well during the year. The counter experienced one lightning strike which damaged a power supply unit in early January. This was replaced and no data was lost over the period. The counter has provided accurate counts with no loss of data for the year.



Table 31: Counter data for the Casla River

Fish Species	Number
Spring salmon	76
Grilse	602
Late Summer Salmon	66
Sea Trout	847
Lamprey/Other	0

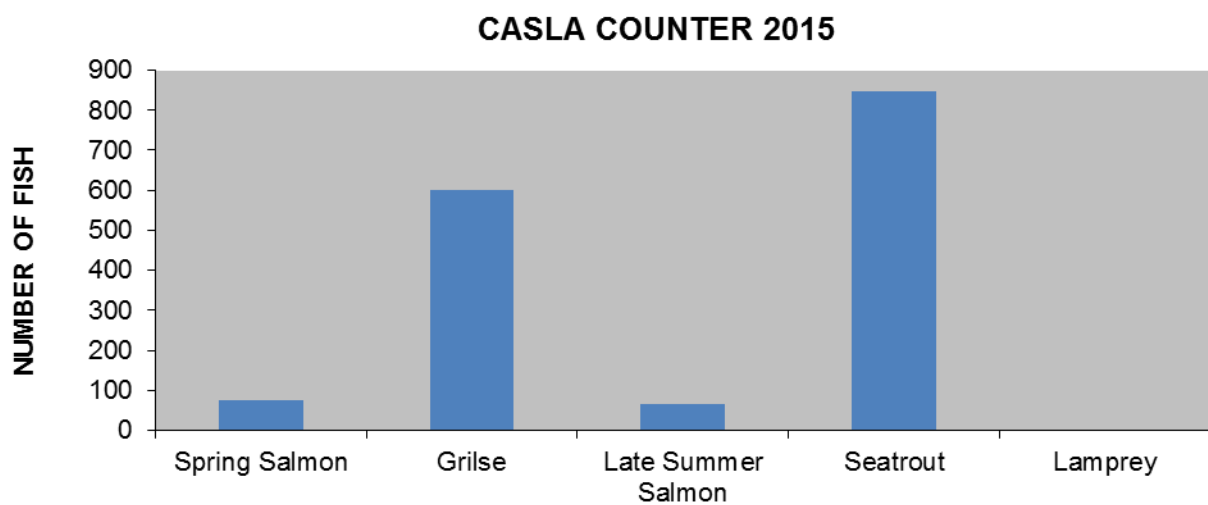
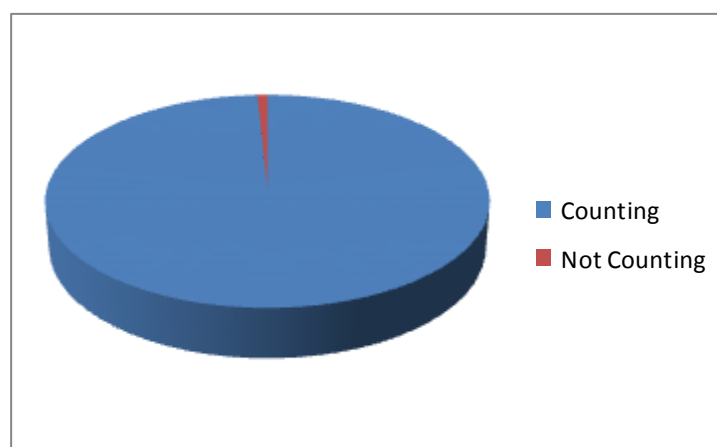


Table 32: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
362	03



17 Invermore River



Type : Logie

Operating: Jan to Dec 2015

Performance: Good

Verified: Yes

17.1 River site and description

The Invermore counter is located upstream of the old trapping facility 100m above the intertidal zone. A new purpose built weir has been constructed to facilitate the counter. The electrode spacing has been set to count salmon and sea trout. The counts are verified using CCTV and uploaded to the web site.

17.2 Operation

The counter has worked well throughout the year. This is the first full year the counter has operated and has provided accurate information replacing the old trapping system. The counts for the river are accurate and it is hoped to eliminate all of the back ground noise on the weir to allow us to get accurate data for the smaller sea trout entering the system over the coming seasons.



Table 33: Counter data for the Invermore River

Fish Species	Number
Spring salmon	0
Grilse	04
Late Summer Salmon	0
Sea Trout	61
Lamprey/Other	0

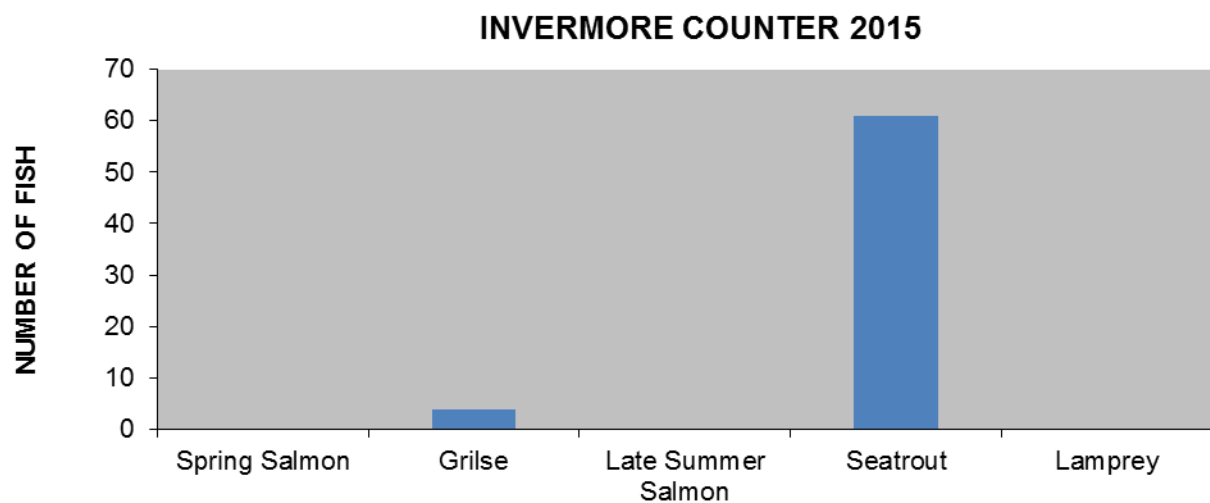
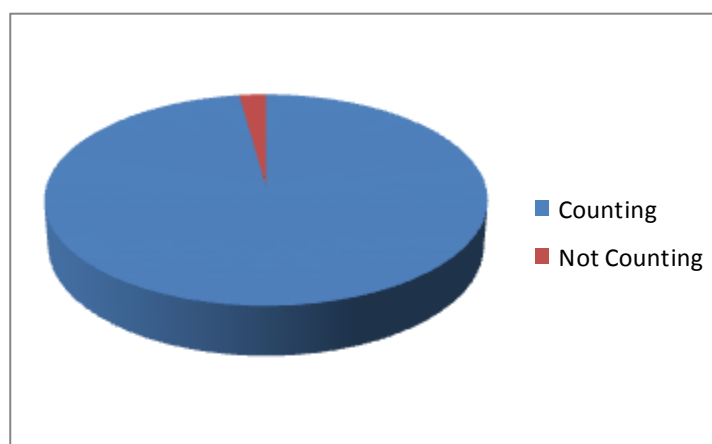


Table 34: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
357	08



18 Owengowla River



Type : Vaki/ Logie

Operating: Jan - Dec 2015

Performance: Good

Verified: Yes

18.1 River site and description

The Owengowla or Gowla counter is located at the old sea trout trapping facility 100m above the intertidal zone. This is a new counting facility completed in 2013. The site consists of a two channel weir which is set up to count sea trout. The counter was installed to replace a partial counter and trapping facility.

18.2 Operation

The Vaki on this site was removed to facilitate the installation of a crump weir and Logie counter. This is the first full year of operation for this counting facility. The site provides a total count for salmon and sea trout for the river. The site has provided accurate counts for 2015 with no breakdowns or loss of data.



Table 35: Counter data for the Owengowla River

Fish Species	Number
Spring salmon	07
Grilse	77
Late Summer Salmon	0
Sea Trout	45
Lamprey/Other	0

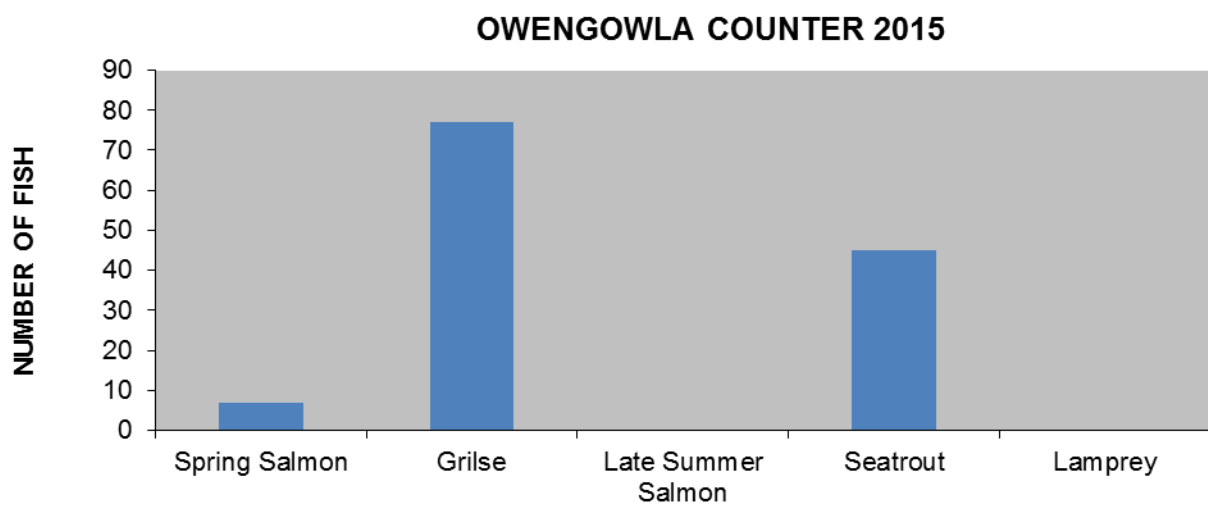
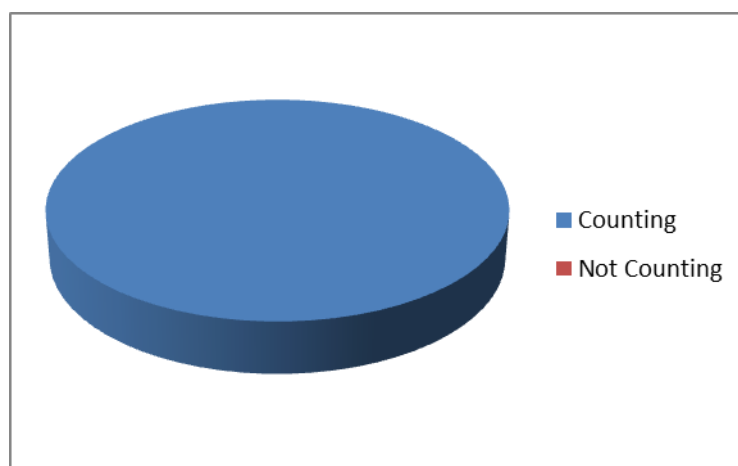


Table 36: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



19 Inagh River (Connemara)



Type : Logie

Operating: Jan – Dec 2015

Performance: V. Good

Verified: Yes

19.1 River site and description

The Inagh counter is located on the Inagh River 40 m above Derryclare Lake. It is the location of the first Logie counter in the country which was installed in the late 1980's. The structure is a purpose built crump weir with one counting channel to facilitate a Logie counter. The counts are verified by CCTV. The fishing rights are privately owned by a syndicate and managed by Lough Inagh Lodge Hotel.

19.2 Operation

The counter worked well throughout 2015. The high water all summer caused some difficulties with verification. The counters counts salmon accurately but sea trout can use an alternative channel which is not counted. The counter provided an accurate count for salmon for the summer. All data has been verified.



Table 37: Counter data for the Inagh River

Fish Species	Number
Spring salmon	36
Grilse	55
Late Summer Salmon	04
Sea Trout	0
Lamprey/Other	0

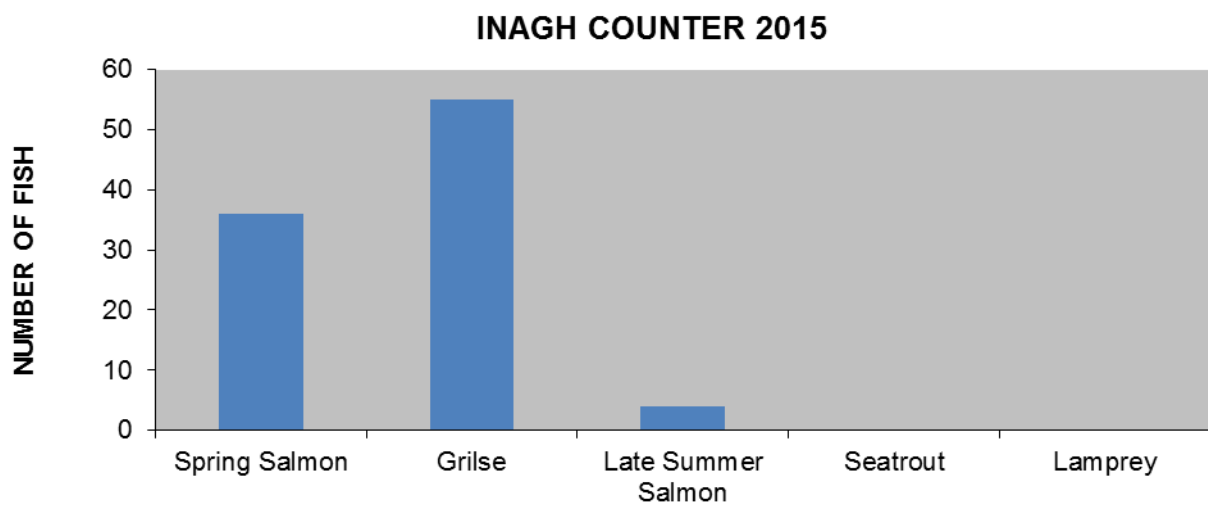
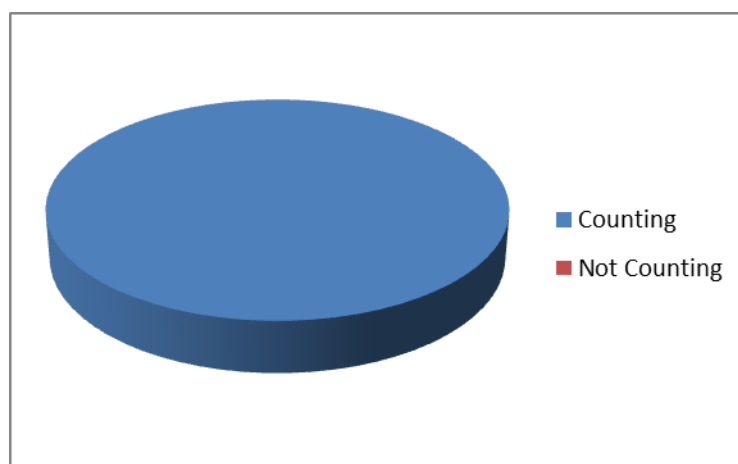


Table 38: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



20 Owenglin (Clifden) River



Counter type: Vaki

Operating: Jan – Dec 2015

Performance: V. Good

Verified: Yes

20.1 River site and description

The site of the counter in the Owenglin River is located in the existing fish pass just upstream of the estuary. The Vaki counter and camera are particularly suited to this type of site. The counter and camera are housed in a stainless steel purpose-built frame which allows the counter to activate the camera and provide video and infra-red silhouette images of the fish. The fishing rights to the Owenglin River are privately owned by the Clifden Angling Club. The catchment includes numerous small lakes.

20.2 Operation

The counter has operated well over the course of the period when fish were running the system. This Vaki counter sustained damage during flooding in November and has since been repaired. The counter is ready to be reinstalled but due to flood conditions and the need to protect the expensive scanner it will not be reinstalled until early 2016.



Table 39: Counter data for the Owenglin River

Fish Species	Number
Spring salmon	52
Grilse	512
Late Summer Salmon	12
Sea Trout	74
Lamprey/Other	0

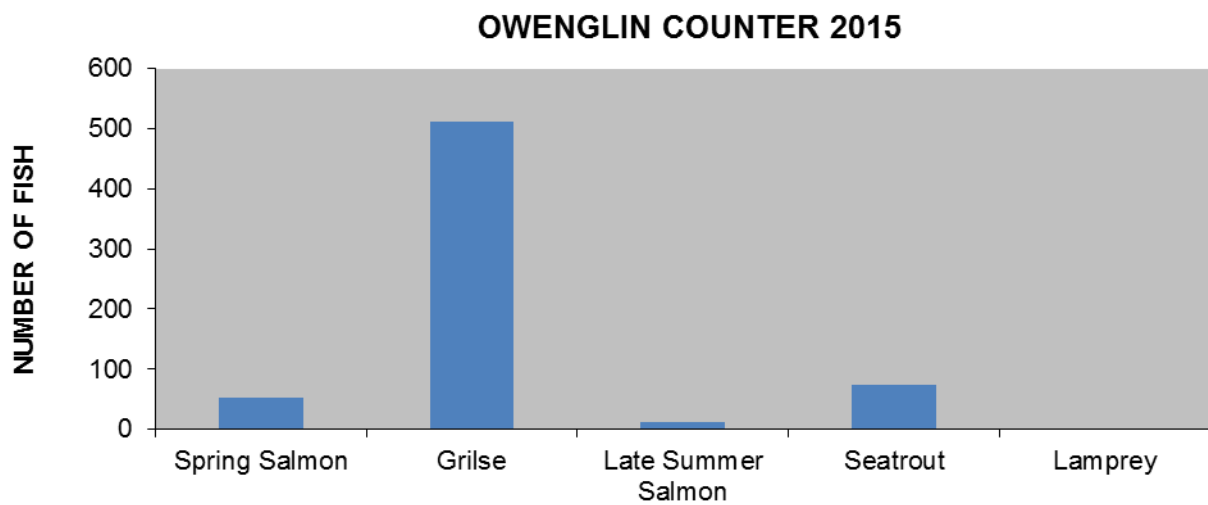
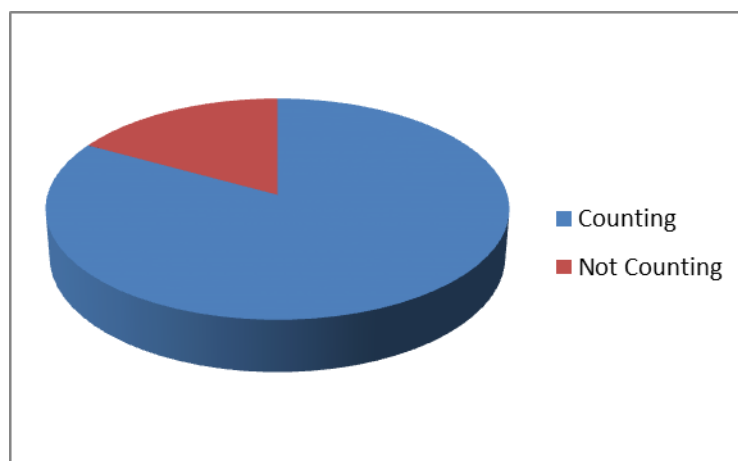


Table 40: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
303	62



21 Dawros (Kylemore) River



Counter type: Logie

Operating: Jan – Dec 2015

Performance: V. Good

Verified: Yes

21.1 River site and description

The Dawros is a privately owned river with three groups owning the fishing rights. The river has traditionally enjoyed good salmon and sea trout runs. The system incorporates three lakes (Kylemore Lake, Pollagcapaill, and the Castle Lake) and the Dawros River which enters the sea in Ballinakill Bay.

21.2 Operation

The counter operated well during the course of the year. The numbers of fish recorded have all been verified by camera. The figures have proved to be very accurate regardless of the water levels. The counter has two operational crumps and there is a complete set of data for the year.



Table 41: Counter data for the Dawros River

Fish Species	Number
Spring salmon	174
Grilse	765
Late Summer Salmon	35
Sea Trout	441
Lamprey/Other	0

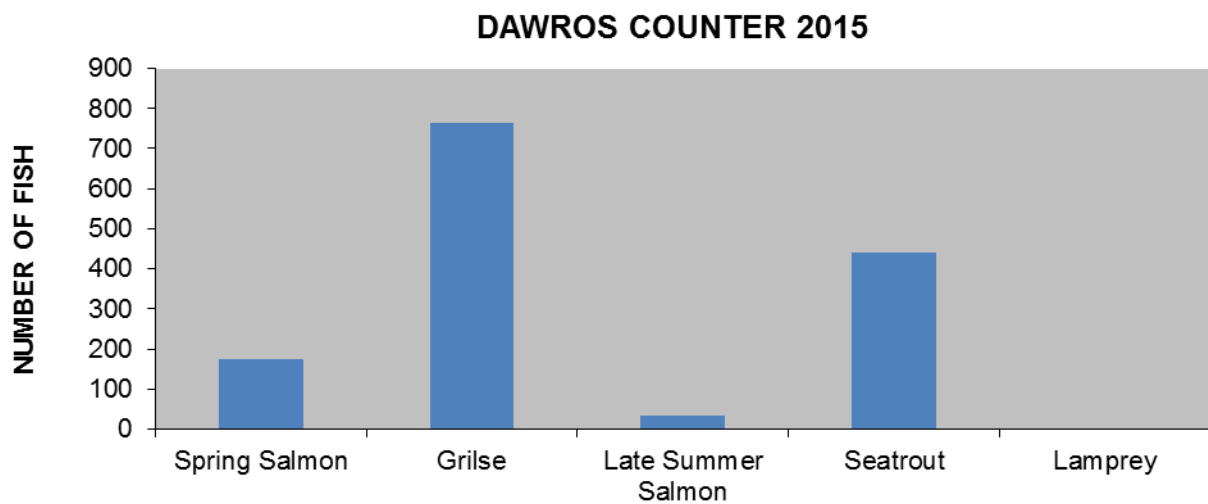
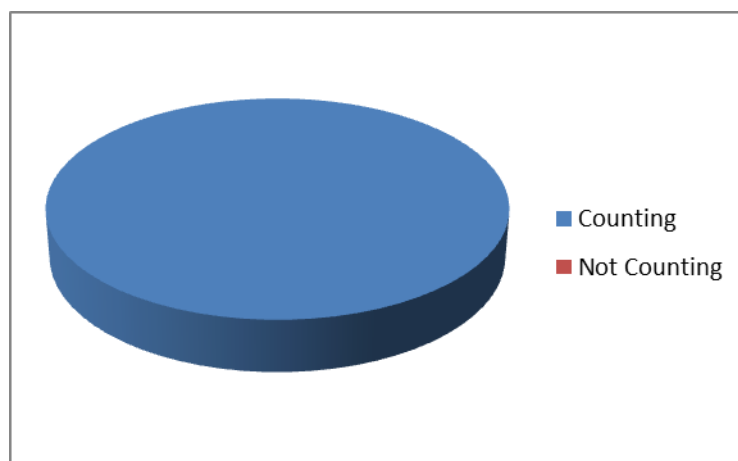


Table 42: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



22 Culfin River



Counter Type: Logie

Operating: Jan – Dec 2015

Performance: V. Good

Verified: Yes

22.1 River site and description

The Culfin counter is located in Lettergesh village down-stream of Lettergesh Bridge. The river is open for angling with a surplus of fish. The structure is a purpose built weir with two counting channels. The counts are verified by CCTV. The fishing rights are privately owned by the Ormsby and Thomson families as well as Kylemore Abbey.

22.2 Operation

The counter has not had any problems and worked consistently throughout the year. The counter has been carefully maintained and has produced accurate verifiable figures. The numbers of fish remains constant each year. A small number of lamprey have been identified crossing the counter each year.



Table 43: Counter data for the Culfin River

Fish Species	Number
Spring salmon	86
Grilse	224
Late Summer Salmon	90
Sea Trout	72
Lamprey/Other	04

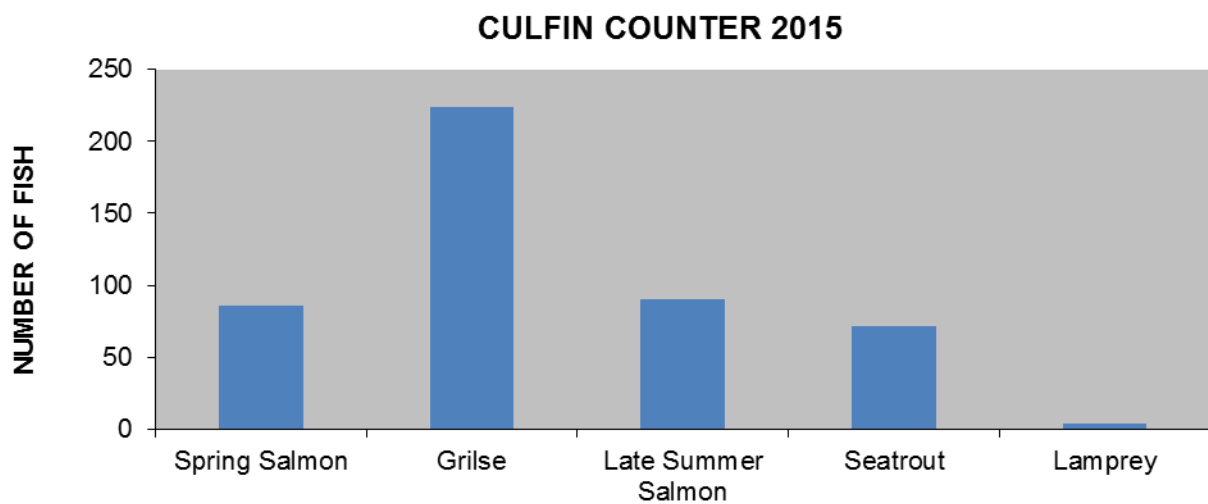
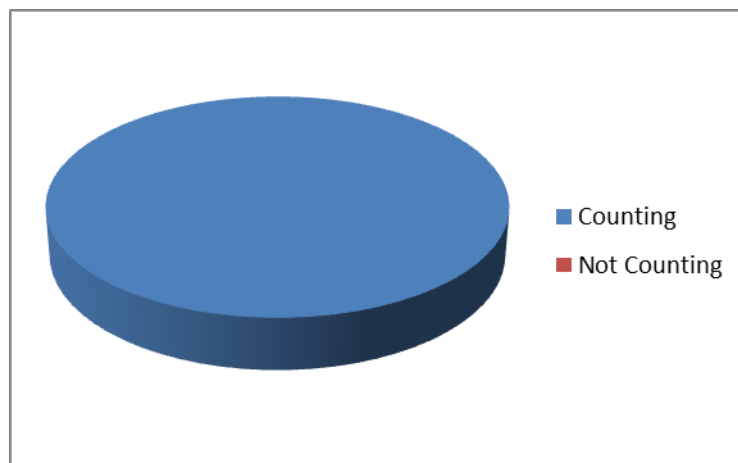


Table 44: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



23 Erriff River



Counter type: Vaki

Operating: Jan- Dec 2015

Performance: V. Good

Verified: Yes

23.1 River site and description

The Erriff River is owned by the State but is leased out by Inland fisheries Ireland Galway to Delphi Mountain Resort. The River has been one of the principle salmon and sea trout fisheries in the West of Ireland for many years. IFI operates a Vaki counter on the river. The location of the counter is at the top of the fish pass which allows migrating fish to pass the famous Aasleagh falls. The Erriff is now a National sea trout index fishery.

23.2 Operation

The counter has worked well during the year with no disruptions in data collection. The counter data is verified by the trap figures. This unique setup allows IFI to assess the efficiency of the Vaki as a counter. The run of salmon was down in 2015 on previous years. The number of sea trout has been very poor and only a fraction of what ran the river in the previous year. The fish counter data is a net figure for wild fish into the system as certain experimental ranched salmon are removed from the trap and are not allowed to access the river to spawn.



Table 45: Counter data for the Erriff River

Fish Species	Number
Spring salmon	107
Grilse	912
Late Summer Salmon	480
Sea Trout	584
Lamprey/Other	0

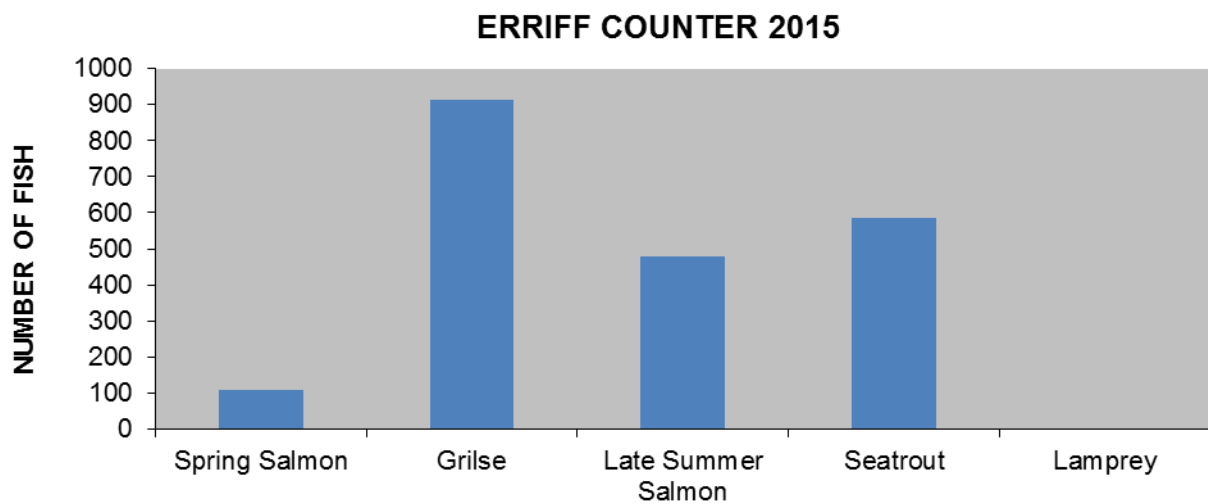
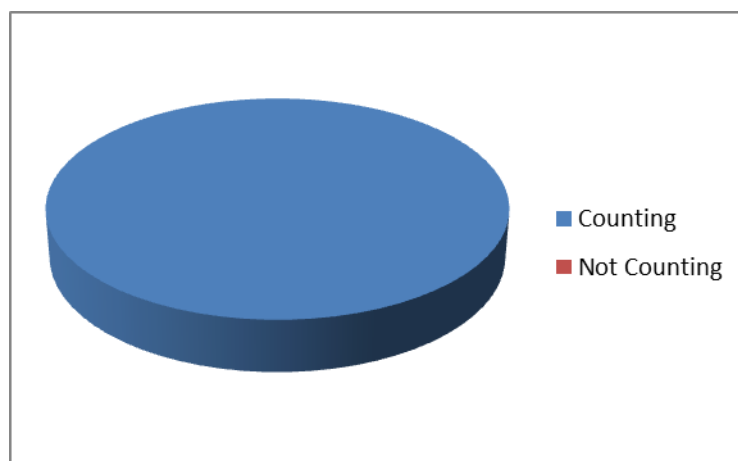


Table 46: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



24 Bunowen River



Counter type: Logie

Operating: Jan-Dec 2015

Performance: V. Good

Verified: Yes

24.1 River site and description

The Bunowen River in the main is owned by the state and managed by Inland Fisheries Ireland there is a small section of the river that is privately owned. The river is 10 kilometres in length and drains an area of 75km squared which includes three lakes. The counter is located beside the IFI store at Ballyhip, Louisburgh, Co. Mayo.

24.2 Operation

The counter has performed well over the year and continues to provide an accurate total count for the river. The connections on crump three were upgraded during the season. The River was reopened in 2014 with a small surplus. The location of the counter is well upstream off the confluence with the sea. The counter usually records a late run of fish – this is not due to fish entering the river late in the season but is due to fish resting in the deep pools in the lower section of the river over the summer and only ascending the river to spawn in November and December.



Table 47: Counter data for the Bunowen River

Fish Species	Number
Spring salmon	41
Grilse	242
Late Summer Salmon	217
Sea Trout	51
Lamprey/Other	0

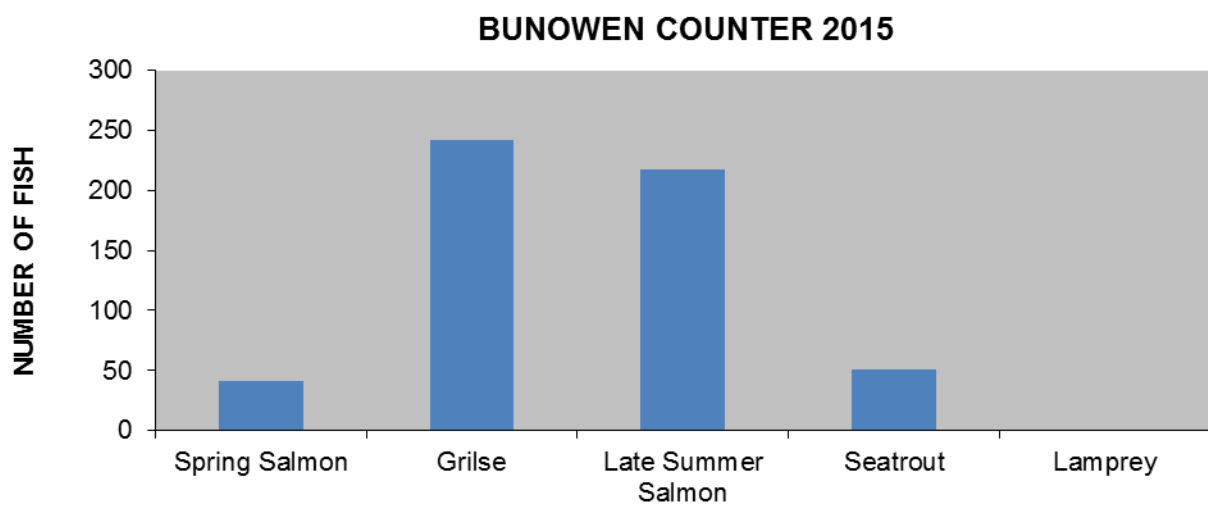
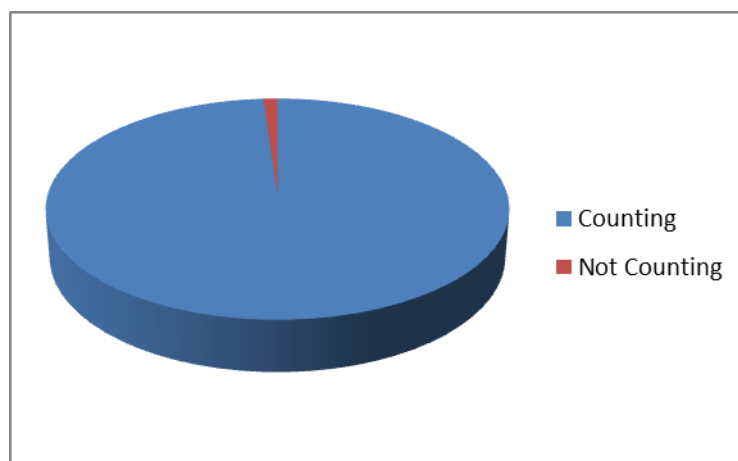


Table 48: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
361	04



25 River Moy



Counter type: Logie and two Vaki's

Operating: Jan – Sept 2015

Performance: V. Good

Verified: No

25.1 River site and description

The completion of the refurbishment works on the Ballina salmon weir allowed for the reintroduction of the counters on the Moy River. Following an upgrade in 2014 there are now two Logie counter crumps and two Vaki counters which were installed in May of 2012. The counters are located on the site of the refurbished salmon weir. The four counters provide a partial count for the river.

25.2 Operation

The counting section of the Moy has been extended this year to two Logie crumps and two Vaki frames. One of the Vaki counters was damaged beyond repair in August 2014. The second Vaki frame worked well over the summer. The Logie in box one worked well. However, most of the fish entering the system passed the weir through the queen's gap this year without being counted because of the high summer water levels. This is the first full year of data for the second crump. The counts from year to year depend on water level and can vary significantly; the facility only provides a partial count.



Table 49 Counter data for the Moy River

Fish Species	Number
Spring salmon	837
Grilse	5083
Late Summer Salmon	1632
Sea Trout	0
Lamprey/Other	0

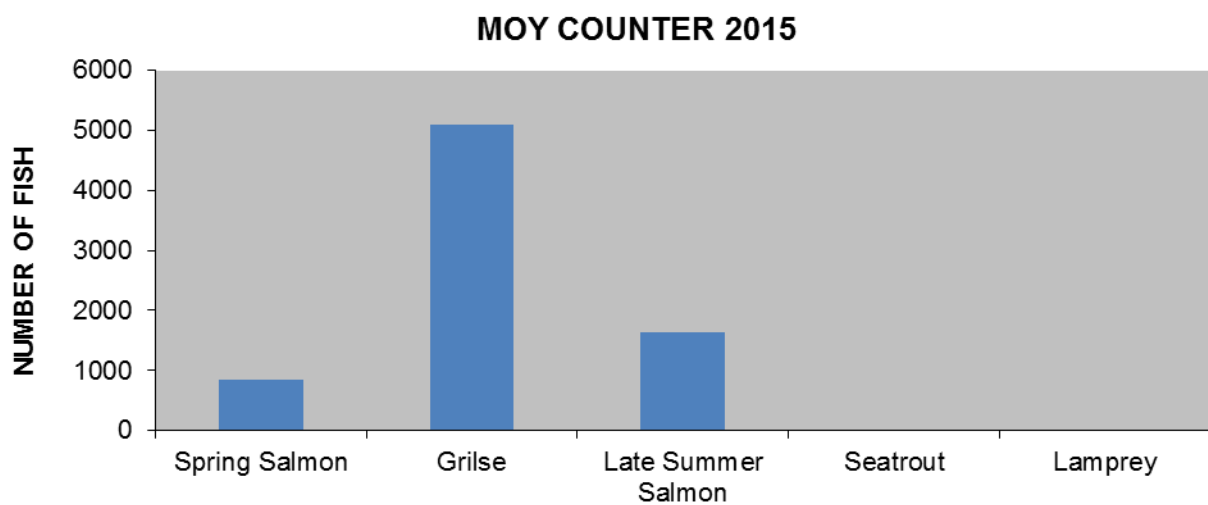
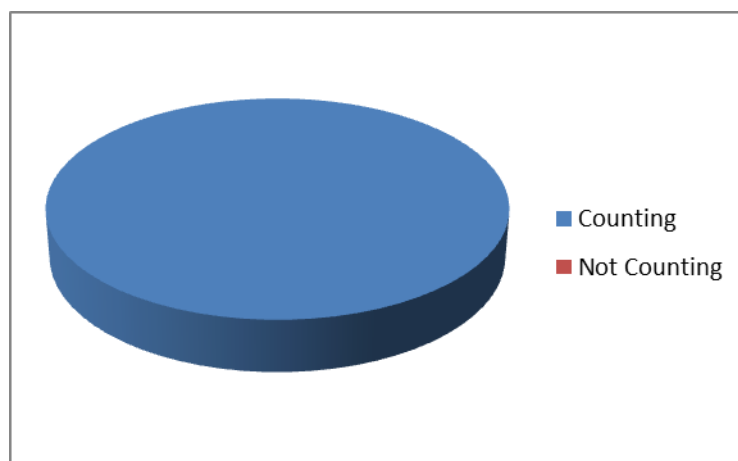


Table 50: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



26 Garavogue River



Type : Vaki

Operating: Jan – Dec 2015

Performance: Good

Verified: Yes

26.1 River site and description

The counter is situated in Sligo town up stream of the estuary. The counter is an infra red Vaki situated in the fish pass. The counter gives a partial count for the river. Due to the low nature of the weir adjacent to the counter the proportion of fish counted is a small percentage of the overall population.

26.2 Operation

The counter was operational for the year. The number of fish recorded using the fish pass is dropping each year, however this may not reflect the salmon runs as fish can cross the adjacent weir with relative ease. Fish exit the system over the weir and are not seen by the counter. There is no CCTV in operation at this site which is normal for a Vaki counter site.



Table 51: Counter data for the Garavogue River

Fish Species	Number
Spring salmon	12
Grilse	8
Late Summer Salmon	0
Sea Trout	0
Lamprey/Other	0

GARAVOGUE COUNTER 2015

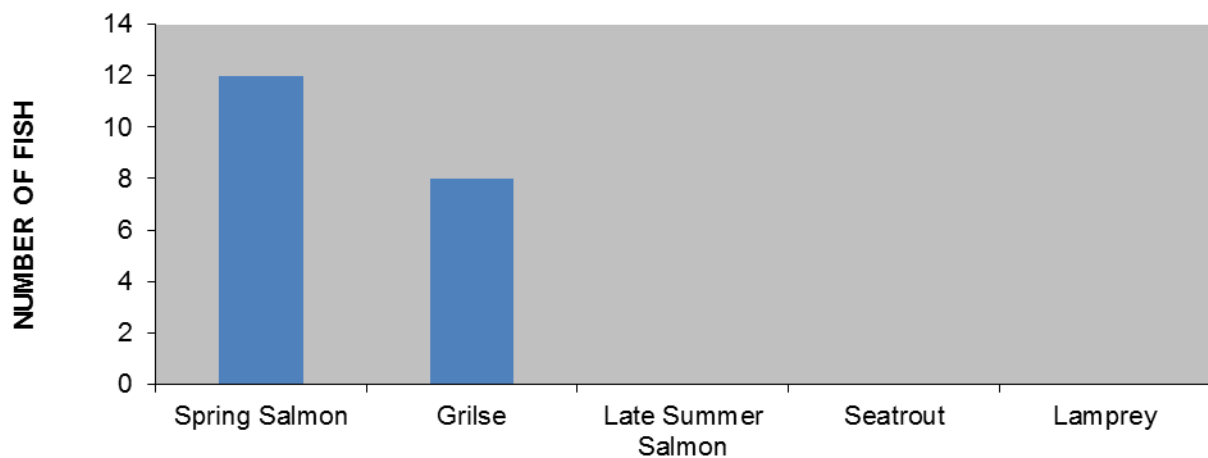
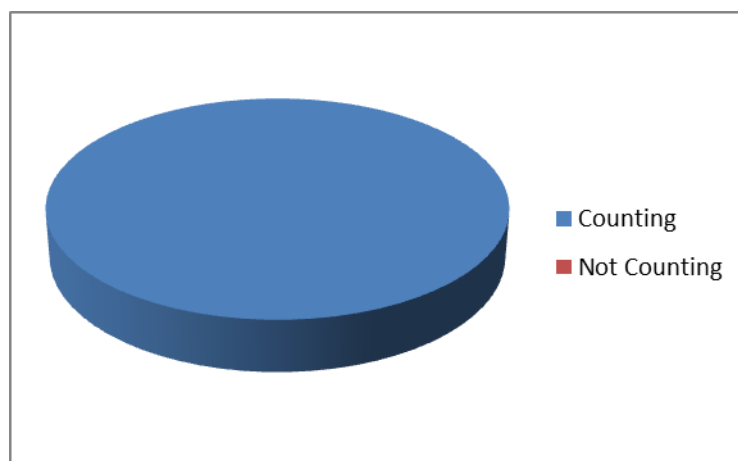


Table 52: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



27 Eske River



Counter type: Logie

Operating: Jan- Dec 2015

Performance: Good

Verified: Yes

27.1 River Site and Description

The Eske fishery consists of the 5km River Eske, the 900 acre Lough Eske and its tributaries. The fishery has a run of spring salmon, a good run of grilse and late salmon. The counter at this installation is a resistivity (Logie) counter.

27.2 Operation

The counter worked well all year and a full count for the year on all 3 channels was obtained. There were fewer power cuts this year and the U.P.S. coped with all of these since they were of short duration. The counter was downloaded and all data was verified on a weekly basis giving accurate counts for the river.



Table 53: Counter data for the Eske River

Fish Species	Number
Spring salmon	88
Grilse	398
Late Summer Salmon	42
Sea Trout	35
Lamprey/Other	0

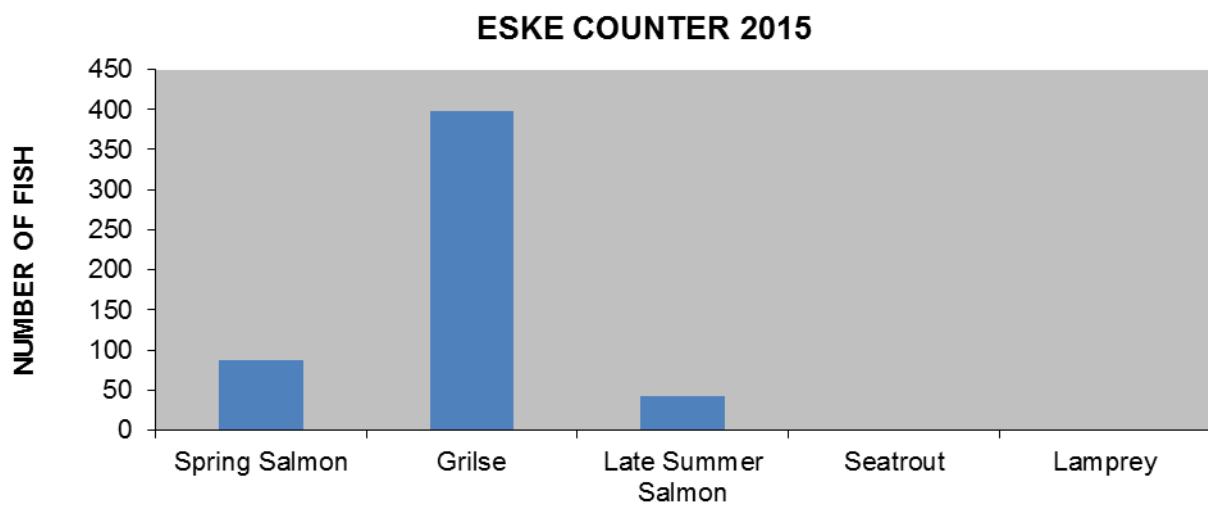
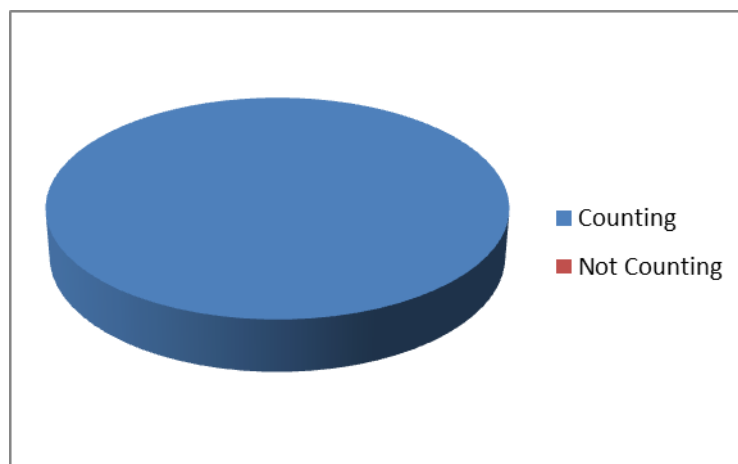


Table 54: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0



28 Eany River



Counter type: Logie

Operating: Jan- Dec 2015

Performance: Good

Verified: Yes

28.1 River site and description

The Eany water fishery is a spate river and forms part of the 125sq km Eany catchment area comprising the Eany water, the lower reaches of the Eanymore and the lower reaches of the Eanybeg. The fish counter is located in the lower section of the river just above the tidal area. The fishery has a small run of spring fish but is noted for its midsummer runs of grilse, late runs of summer salmon and for sea-trout.

28.2 Operation

The Logie counter worked well resulting in a fairly comprehensive count for the year for the river. A small number of maintenance issues were sorted out promptly and this ensured a continuous accurate count. All of the data collected by the counter has been verified by CCTV cameras.



Table 55: Counter data for the Eany River

Fish Species	Number
Spring salmon	65
Grilse	282
Late Summer Salmon	37
Sea Trout	80
Lamprey/Other	0

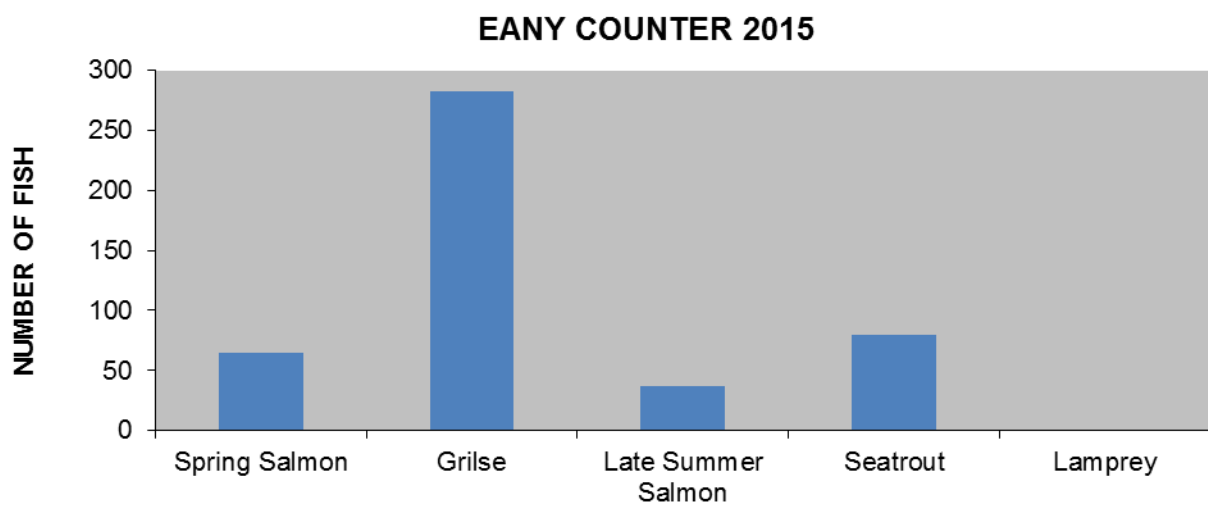
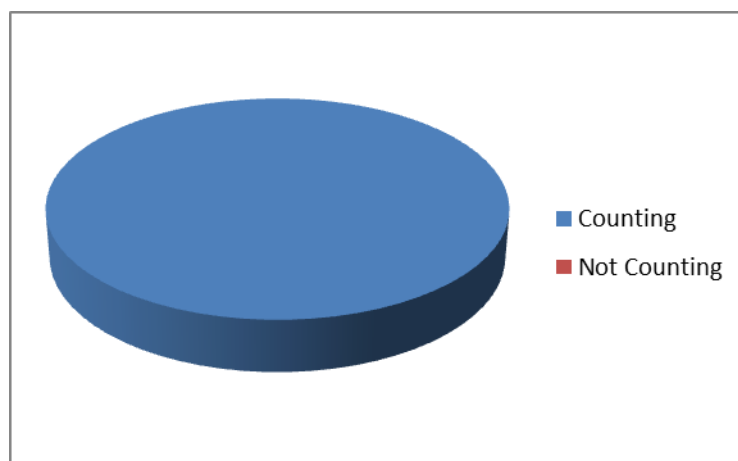


Table 56: Counter Operations

Counter Operational (Days)	Counter not operational (Days)
365	0





Conclusion

The fish counter programme has operated successfully despite a difficult year with severe winter flooding and numerous electrical storms causing damaged to some installations. Investment in the fish counter programme continued with repairs and upgrading of equipment at most counter sites.

Further projects are in the planning stages including the Bandon River and the Lackagh River for 2016 these will be installed in the summer subject to relevant permissions and approvals as well as suitable water conditions.

Acknowledgements

The compilation of this report would not be possible without the expert work and efforts made by many IFI staff attending to the counters and the relevant software. I am also indebted to the team of staff who put in the time working on the counters and verifying the results.