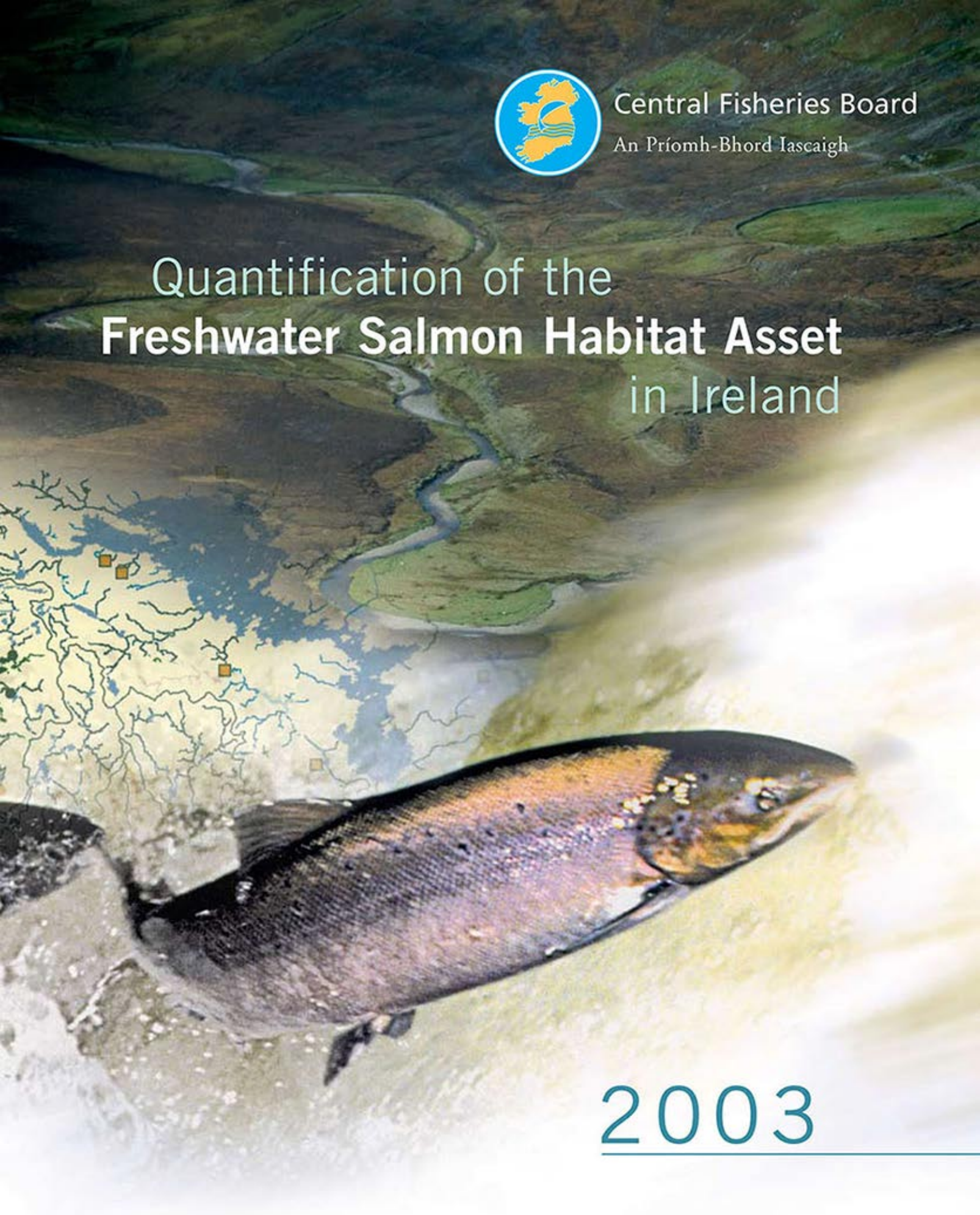

Central Fisheries Board
An Príomh-Bhord Iascaigh

Quantification of the **Freshwater Salmon Habitat Asset** in Ireland

2003

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Quantification of the **Freshwater Salmon Habitat Asset** in Ireland using data interpreted in a GIS platform

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Foreword

The Minister of State at the Department of Communications, Marine and Natural Resources
Mr. John Browne T.D.

The over riding objective of my Department has been to preserve the salmon resource in its own right and for the coastal and rural communities that it helps to support. The economic goals for a sustainable commercial salmon fishery based on quality and value rather than volume and the development of salmon angling as an important tourism product are both fully compatible with the primary objective. In this regard, the work of the National Salmon Commission and its Standing Scientific Committee is of vital importance. Their advice relies on clear and robust scientific evidence of the status of the salmon stock. In furthering the salmon management agenda, the Central Fisheries Board, with funding under the National Development Plan, undertook this project to quantify the freshwater salmon habitat asset in Ireland. The project has delivered vital information on the salmon resource.

The information provided by this project is already being used to contribute to the scientific process in determining salmon conservation limits and determining juvenile salmon production. The successful completion of this project has been achieved through collaboration between State Agencies such as the Central and Regional Fisheries Boards, the Marine Institute, the Environmental Protection Agency and the Ordnance Survey of Ireland and consultants Compass Informatics Ltd. The results will contribute to the continued rational management of Ireland's important wild salmon resource. The data produced will be used by these and other State agencies, which have an input into the management of the resource.

I am particularly proud that Ireland leads the way in utilizing information technology to manage its salmon fishery. I am confident that the information delivered in this report, in combination with other initiatives being advanced by my Department, will support the sustainable long-term future of salmon in Ireland. I wish to congratulate the Central Fisheries Board on their project and the delivery of this report.

John Browne T.D.

CEO's Statement

Chief Executive Officer, Central Fisheries Board
John O'Connor

In recent years significant progress has been made in the management of the salmon resource In Ireland and the Central Fisheries Board has been to the fore with the Regional Fisheries Boards and the Department of Communications, Marine and Natural Resources in delivering this new management regime. The completion of this new and innovative study to determine the wetted area of potential salmon habitat in Ireland, together with the carcass tagging and logbook scheme, is one of a suite of measures introduced in recent years for the improved management of salmon in Ireland. This new study allows, for the first time, salmon conservation limits to be set for each river and is consistent with the North Atlantic Salmon Conservation Organisation (NASCO) advice that management measures for wild North Atlantic salmon stocks are aimed at maintaining wild salmon escapement above conservation limits for each salmon stock.

I wish, on behalf of the Central Fisheries Board, to pay tribute to the seven Regional Fisheries Boards who contributed greatly to this study, and to the Environmental Protection Agency, the Ordnance Survey of Ireland and Compass Infomatics for their collaboration in this project.

I am confident that the ouptuts of this study will greatly enhance the management of wild salmon in Ireland and make a real contribution to its long-term sustainability.

John O'Connor

Executive Summary

The objectives of this project were:

1. To measure the quantity of potential salmon producing habitat (wetted river and lake surface areas) on a national, Fisheries District and individual river system basis.
2. To determine and to measure the Quality/Structure (Gradient) of potential salmon producing habitat on a national, Fisheries District and individual river system basis.
3. To determine the extent of salmon 'anadromy'. The extent of 'anadromy' is a measure of the area of rivers and lakes in a catchment that can be effectively accessed by salmon entering that catchment from the sea and that is therefore available for spawning and consequently can be utilised for the production of juvenile fish.
4. To quantify the extent of impaired habitat from a water quality perspective for juvenile salmon production.

A series of complex datasets (including river catchment topography, riverine gradient, lakes, catchments & Fisheries Districts) with national coverage were required for the development of an integrated, GIS based, data model for the quantification of the freshwater salmon habitat asset and for the determination of the quantity of habitat available to migratory salmonids.

261 discrete migratory salmonid 'Fishery Systems' were identified nationally of which 173 are recorded as being 'salmon and seatrout' and 88 as being 'seatrout only'.

The estimated total wetted area of river and stream (fluvial) habitat in Ireland is 182.4 million m^2. The 173 salmon systems were estimated to contain 160.5 million m^2 of fluvial habitat of which 113.0 million m^2 of useable habitat are available. A total of 40.1 million m^2 of potential fluvial salmon habitat is located above the four major hydro-electric schemes.

A further 1,056 million m^2 of lake habitat was identified in the 173 salmon systems of which 446 million m^2 are available for migratory salmonid production.

Fisheries Districts were ranked by the quantity of accessible fluvial habitat. The Waterford District has the greatest accessible fluvial habitat (24.3 million m^2) of the 17 national Fisheries Districts or 21.5% of the national total. Individual salmon river systems were also ranked by the quantity of accessible fluvial habitat. The River Suir in the Waterford District has the largest quantity of accessible fluvial habitat in the country (8.8 million m^2) or 7.8% of the national total. 52% of the total accessible fluvial habitat is contained within 10 river systems.

Data are presented on both salmon and sea trout 'Fishery Systems' and sea trout only 'Fishery Systems' on a District basis. For example the Leannan River in the Letterkenny District accounts for 22% of the accessible fluvial habitat in the District.

Habitat quality data using the Amiro (Amiro,1993) and Rosgen (Rosgen,1994) gradient classification systems are presented. For example, in the Kerry Fisheries District 48% of the potential salmon producing habitat has a gradient of < 0.5% (Amiro Class 1).

Poor water quality impacts on the potential of rivers to produce salmon. The Environmental Protection Agency monitor water quality at over three thousand sites nationally from which a preliminary estimation of the area of channels with inadequate water quality which has been integrated into this report. The percentage of habitat area with impaired water quality on a District basis is presented. Data are presented on the quantity of habitat with a value of Q3 (moderately polluted) or less and a value of Q3/4 (slightly polluted) or less. Habitat with a Q value of Q3/4 or less has been identified as an impediment to optimal juvenile salmon production. A Q value of Q3 or less indicates a more severe impairment. Nationally, 4.5% of potential salmon habitat is estimated to have a Q value of Q3 or less and 17.3% of the habitat recorded a Q value of Q3/4 or less.

This report was developed using data provided by Ordnance Survey Ireland, the Environmental Protection Agency and the Central and Regional Fisheries Boards. The project represents a significant innovation in freshwater fishery habitat assessment in Ireland. It is recommended that further field data (stream width and confirmation of the extent of anadromy) are collected to confirm or improve the geographical information base, the results of which may alter the estimations presented in this report. In addition it should be noted that the EPA water quality assessment is carried out on an onging triannual basis and is subject to change over time in response to changing pressures on water quality.

The outputs of this wetted area study, combined with the Bayesian Hierarchical Stock and Recruitment Analysis (BHSRA), are being used in conjunction with the previous catch based model to provide high quality scientific catch advice for the National Salmon Commission.

1. Introduction

The North Atlantic Salmon Conservation Organisation (NASCO) adopting 'the precautionary approach' to fisheries management in 1998 advised that management measures for salmon stocks in the NASCO Convention Area should be aimed at maintaining salmon escapement above pre-agreed conservation limits (CLs). The CL for Atlantic salmon is defined by NASCO as "the spawning stock level that produces maximum sustainable yield".

Previously the Salmon Task Force Report (1996) recommended that the management of Irelands salmon stocks be based on achieving spawning escapement targets for each individual river stock and maintaining those stocks above pre-determined conservation limits.

In 1999, the National Salmon Commission was established to advise the Minister on the management, development and conservation of stocks of wild salmon and sea trout. In particular, it was established to advise the Minister on the setting of national and District total allowable catches (TACs) and quotas.

To assist in the provision of scientific advice for the setting of TACs and quotas, a Standing Scientific Committee was established. The Scientific Committee provides catch advice on a Fisheries District basis. The advice is predicated on the precautionary principle of allowing sufficient spawning escapement into a District to achieve a pre-determined escapement goal.

Currently (2003) the escapement goals or conservation limits for the 17 Irish Fisheries Districts are determined using a pseudo stock and recruitment model (Potter et al., 1998) based on historical catch data reported in these Fisheries Districts since 1970. The 17 Irish Fisheries Districts are in essence administrative entities for the management of commercial and recreational fishing and for the provision of statistics regarding fishing activity and fish caught. The boundaries of these Districts are statutorily defined and consist of the rivers, lakes and estuaries and an area of sea extending twelve miles from the shore (since 1999 fishing has been restricted to within 6 miles of the statutorily defined District boundaries). At present commercial exploitation of salmon is predominantly by drift nets (85% nationally) in a mixed salmon stock environment. By its nature this means that salmon from many individual river populations from within the District as well as from other Districts are reported in the District catch statistics.

The catch based pseudo stock and recruitment model is a robust model, in that it is populated with high-density data. However, because of the mixed stock nature of the predominant fishing activity i.e. drift netting, it is not sensitive to the spawning requirements or the inherent productive capacity of the individual river systems within the Districts. In order to provide advice for river specific conservation limits, recommended by both NASCO and the Salmon Task Force, an alternative approach is necessary.

Ideally river specific stock and recruitment analysis would be the most accurate way to determine river specific conservation limits. However, given that river specific stock and recruitment studies are resource-intensive and take a long time scale to cover several generations and a wide range of stock levels, it will, for the foreseeable future, be necessary to transport CLs from data-rich rivers to data-poor rivers (Prevost et al., in press).

The immediate technical challenge will be to provide a standardised approach for measuring the physical resource, to provide a basis for allowing the transport of biological reference points derived on

the existing rivers with stock and recruitment studies. A review (Crozier et al., 2004) of the application of recent technologies in this respect indicates that tools are evolving quickly which offer the ability to carry out this task more readily and cost effectively than heretofore. It is now possible to carry out physical habitat measurement at various levels of a theoretical hierarchy of complexity, in some cases without the need for field survey, other than for verification purposes (e.g. map based variables and more recently, digital aerial photography).

An intermediate habitat variable such as wetted area may presently be the only viable approach for quantifying production area for widespread transport of stock and recruitment relationships. This project will show that this kind of information can readily be obtained (without the need for extensive field based survey) and can be related to biological production information from most stock and recruitment data sets.

Despite limitations in using intermediate level variables such as wetted area, it is felt that these are not more constraining than many of the other limitations imposed in the transport process by areas such as lack of biological data and unrepresentative stock and recruitment data sets. Given this background, it has been recommended (Crozier et al., 2004) that the use of Bayesian techniques (which address several sources of variability simultaneously) will allow the use of a variable such as wetted area to simply scale catchments for transport purposes. This is especially so for development of national (or higher level) conservation requirements, where presently interim pseudo stock/recruitment methods are being used by the National Salmon Commissions Standing Scientific Committee and more generally by the ICES working group.

The objectives of this project were:

1. **To measure the quantity of potential salmon producing habitat (wetted river and lake surface areas) on a national, Fisheries District and individual river system basis.**

The length of river and stream channels in the State has been measured from Ordnance Survey maps and is in excess of 70,000 km. The width of the channels however is not recorded on maps. Estimation of the wetted surface therefore requires a measure of stream width and how it varies along river systems. Previous work undertaken by the Marine Institute, Central Fisheries Board and Compass Informatics (McGinnity *et al*., 1999) has shown that a useful surrogate for exhaustive field surveys of river width can be achieved through the statistical analysis of map data. This is based on the relationship between stream width, and other geographical factors including the length of upstream river, upstream catchment area, stream order and local gradient.

The key information components of the work package are detailed GIS data sets on the stream channels and gradient which were sourced from the Ordnance Survey of Ireland. The method produces an estimate of the width for each channel section that can be stored in a GIS map database within the existing Central and Regional Fisheries Boards GIS systems. This provides a database with appropriate front-end and map output capability for the reporting of salmon habitat wetted area statistics for all the river catchments in the country.

2. **To determine and to measure the quality, in terms of structure (gradient), of potential salmon producing habitat on a national, Fisheries District and individual river system basis.**

Stream gradient is known to be the principal determinant of juvenile salmon production (Amiro, 1993). Channel gradient is not explicitly recorded on existing maps. However, the Ordnance Survey derives gradient information during its analysis of aerial photography for the production of maps. A previous study (McGinnity *et al.*, 1999) produced specialist software that can convert this data into a GIS gradient database. The work package provides a detailed database and map of gradient for analysis in a GIS. Based on previous analysis of the Ordnance Survey data it is estimated that the average length of channel for which an individual measure of gradient can be produced is less than 10 metres. This provides a database with appropriate front-end and GIS map output capability for the reporting of salmon habitat gradient statistics for all the rivers in the country. Gradient statistics are presented using the **Amiro (1993)** eleven category class system and also the **Rosgen (1994)** four category class system.

3. **To determine the extent of salmon 'anadromy'**

The extent of 'anadromy' is a measure of the area of rivers and lakes in a catchment that can be effectively accessed by salmon entering that catchment from the sea and that is therefore available for spawning and consequently can be utilised for the production of juvenile fish. Therefore areas above impassable barriers to migration of salmonids must be identified and subtracted from the overall habitat area estimation. Local information on candidate barriers to migration was obtained from experienced Regional Fisheries Board staff throughout the country.

This preliminary analysis was validated using widely distributed juvenile fish stock information (2,614 electrofishing sites) collected throughout Ireland. These data were collated into a national database that was interrogated for this project. The presence or absence of juvenile salmon (usually fry) was investigated above any suspected obstacle.

4. **To quantify the extent of impaired water for juvenile salmon production.**

The EPA Biological River Monitoring Programme carries out a triennial survey of the biological elements of water quality at over 3,300 monitoring stations on the main river channels. These surveys derive a biological quality rating or 'Q value' of waters at each monitoring station. Recent studies carried out by the Central Fisheries Board (T. Champ, *pers. comm.*) correlating the presence or absence of individual fish species to water quality (Q values) indicate that there is a relationship between juvenile salmon distribution and water quality Q values. This project develops a GIS database that identifies stretches/river of inadequate water quality for salmon based on the EPA river 'Q value' assessment system. The project delivers a database with appropriate front-end and GIS map output capability for reporting stream areas likely to be compromised for juvenile salmon production.

2. Data Preparation and Modelling

2.1 Preparation of Datasets

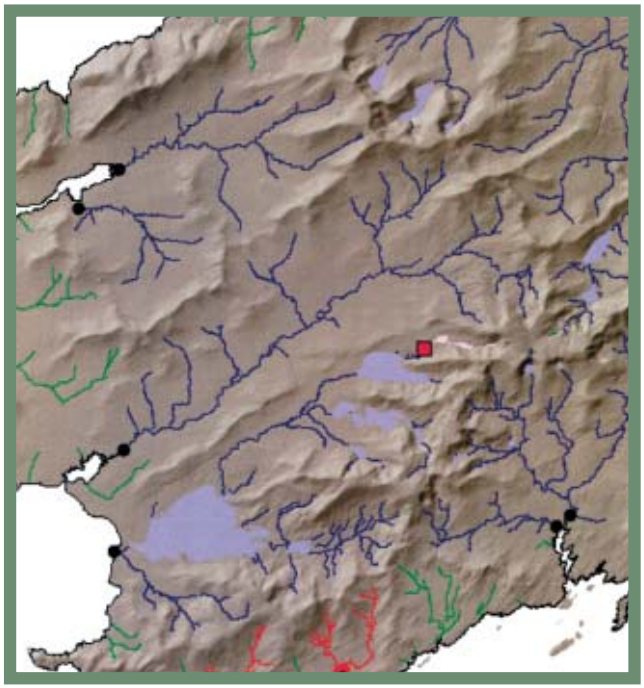
A series of complex data sets (including catchment topography, river networks, river gradient, lake areas, catchments & Fisheries Districts) with national coverage were required for the development of an integrated, GIS based, data model for the analysis of anadromy and the quantification of the freshwater salmon habitat asset. Most of these datasets have been developed from basic digital map data produced by the Ordnance Survey of Ireland (OSI) as extracts from the 1:50,000 scale 'Discovery Series' database. This database is derived by photogrammetrical analysis of digital aerial photography. Specifically designed software was required to transform the OSI data into the formats required for the project.

In parallel with this project, a long term GIS development project has been established by the Environmental Protection Agency (EPA) the purpose of which is to develop an integrated data 'warehouse' of environmental and geographical datasets to support the implementation of the EU Water Framework Directive. These data sets are organised in a formal data model whose design is based on an EU Guidance Document ("Guidance Document on Implementing the GIS Elements of the WFD") developed by the EU Water Framework Directive Common Implementation Strategy Working Group GIS.

The EPA, as a project participant, provided key data from their data warehouse for initial use and further development by the project. These data sets were in incomplete form but were already a significant enhancement of the original OSI materials. The project has furthered the development of these data sets by performing quality improvement edits and the derivation of key statistical descriptors or attributes.

The GIS software utilised by the project was the ESRI ArcView 3.2 system, customised with the Avenue programming language. The data are held in Shape file and Grid file formats.

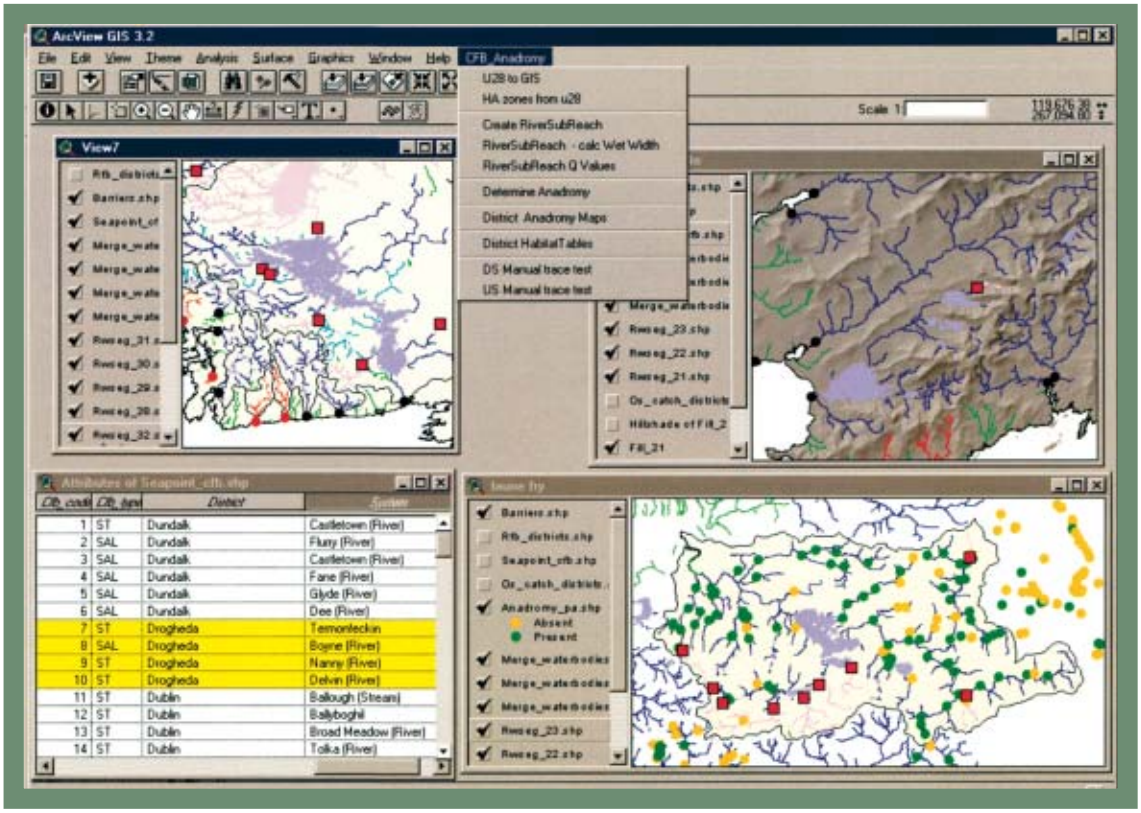
These improved data sets conform with or exceed the specification of the EU WFD GIS data model and will be utilised by both the Central Fisheries Board and the EPA in their GIS systems. A diagram of the GIS data model and software functions used for this project is presented in Figure 1.



Example of a Digital Terrain Model used for Hydrometric area 21 showing the Currane system

2.1.1. Digital Terrain Model

A Digital Terrain Model (DTM) is a computer generated '3 dimensional' representation of topography, shown as a smooth and continuously variable matrix of elevation values stored in grid squares. The Environmental Protection Agency had previously developed a DTM with national coverage, utilising a grid



This study used data analysed in a GIS platform

square size of 20 metres. The data set is presented as 37 sub-grid areas, each representing an EPA Hydrometric Area.

The EPA DTM was adopted by the project and was enhanced by the development of subsidiary datasets on; 1) the direction of water flow across the DTM surface; 2) the accumulated area of flow to each point on the DTM ('flow direction' and 'flow accumulation' sub-grids respectively). This latter function enables the calculation of the upstream catchment area for all river reaches. Such catchment area determination is a requirement for the subsequent calculation of the width, based on a statistical formula, of each river reach (section 2.2.2).

The derivation of the 'flow direction' and 'flow accumulation' sub-grids from the DTM for each Hydrometric Area was performed by the custom GIS automated function "derive hydrological grids", (Figure 1).

2.1.2 Rivers data set

The river data set utilised in the project was sourced from the EPA. This was developed from original Ordnance Survey data (1:50000 scale) and contained added information on stream order and corrected segment orientation (downstream). The data are organised into Hydrometric Area data sets.

Further refinements to this EPA data set were carried out by the project to provide data suitable for river network analysis and ultimately the calculation of the extent of anadromy. This data set underpins the mapping of anadromy in the 261 Fishery Systems and is also known in the EPA WFD GIS data warehouse as the WFD **RiverSegment** (RWSEG) Class.

Quality improvement refinements included:

Basic editing functions:

- Manual removal of any gaps in mapped river lines;
- Removal of any unnecessary breaks or 'nodes' along river segments between confluences;
- Removal of any residual line flow direction errors;
- Accurate connection to lakes;
- Automated calculation of statistics
  1. length of channel upstream of each river segment;
  2. area of catchment above each river reach;
  3. gradient of each river segment based on DTM analysis

2.1.3 River Channel Gradient

River channel gradient is an important determinant in the calculation of channel width (section 2.2.2). Whereas a general estimate of channel gradient can be determined by the 'overlay' of the river system **(RiverSegment Class)** on the **DTM** in a GIS, this is not of great accuracy.

The Ordnance Survey has developed a more detailed estimate of gradient in data sets as part of their photogrammetrical analysis ('Discovery Series' maps) of aerial photography. Whereas these data convey greater gradient accuracy, they are not in a format that is ready to use within a GIS. Software was developed by the project to:

1) convert these data into a GIS usable format (custom GIS automated function "u28 to GIS") (Figure 1).

2) assemble the component data sets into Hydrometric Area packages (custom GIS automated function "HA U28") (Figure 1).

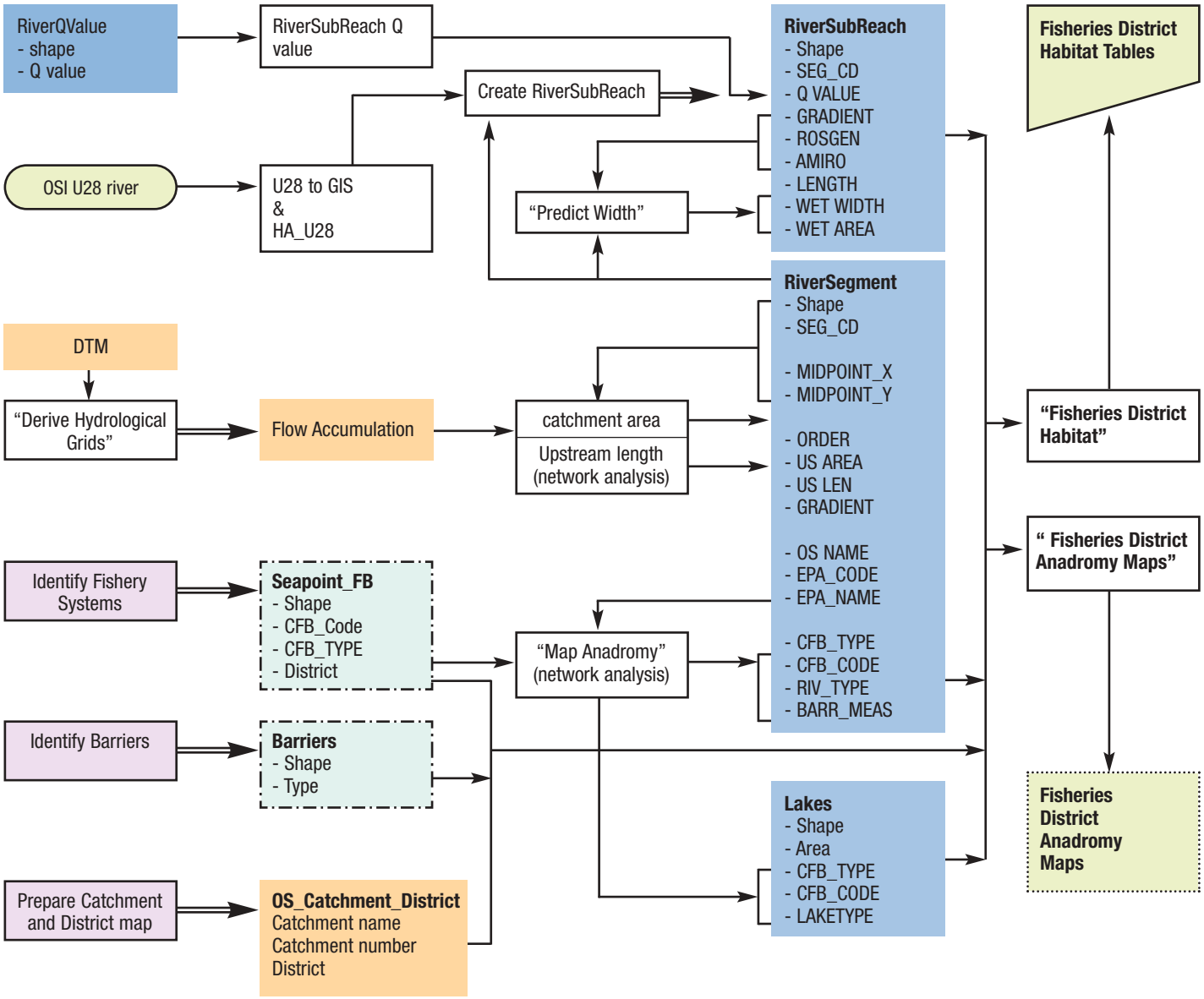
3) Map these data onto the **RiverSegment** Class to produce sub-reach gradient variation (average sub-reach length ~ 15 metres) along each **RiverSegment** reach as the **RiverSubReach** Class. This was performed by the custom GIS automated function "Create RiverSubReach" (Figure 1).

2.1.4 Fisheries District Map

The Fisheries District Map was developed from a GIS catchment map held in the Central Fisheries Board GIS. This catchment map was originally developed from the Ordnance Survey "Rivers and their Catchment Basins" paper map of 1958, whose boundaries were transposed onto the 1:50000 scale Discovery Series maps.

Fisheries District boundaries largely conform with the arrangement of river catchments, however the boundaries along the coast between Districts are often located at prominent coastal features (e.g. headlands). These are listed in the Table "Coastal Extent of Fisheries Districts and Names of the Principal Rivers in each District", SI (329) 1982. Thus, certain coastal catchment areas (which are shown on the original Ordnance Survey map as areas coded by a letter rather than a 'catchment number') were sub-divided to conform with the Fisheries District extents. The modified catchment delineations and catchment Fisheries District codes are recorded in the **OS_Catchment_District Class**. The amalgamated **Fisheries District** boundaries are recorded in the Fisheries District Class data set.

Figure 1 GIS Data Model and Software Functions for Quantification of Salmon Habitat Asset



Key to Figure 1 (GIS Data Model and Software Functions for Quantification of Salmon Habitat Asset)

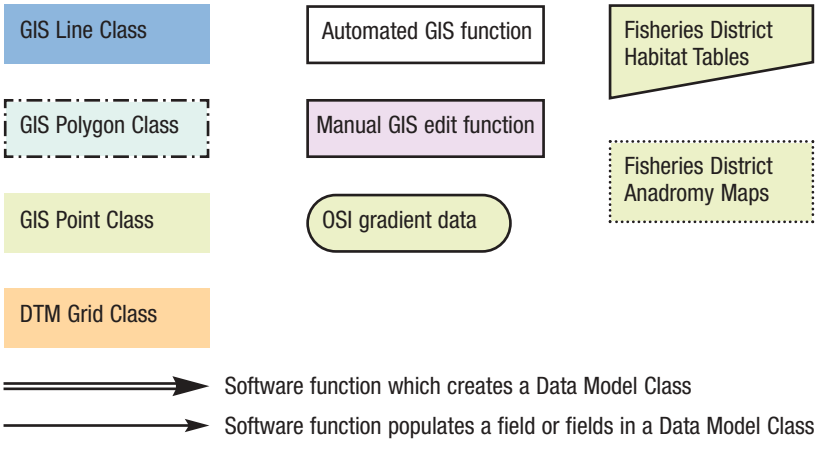
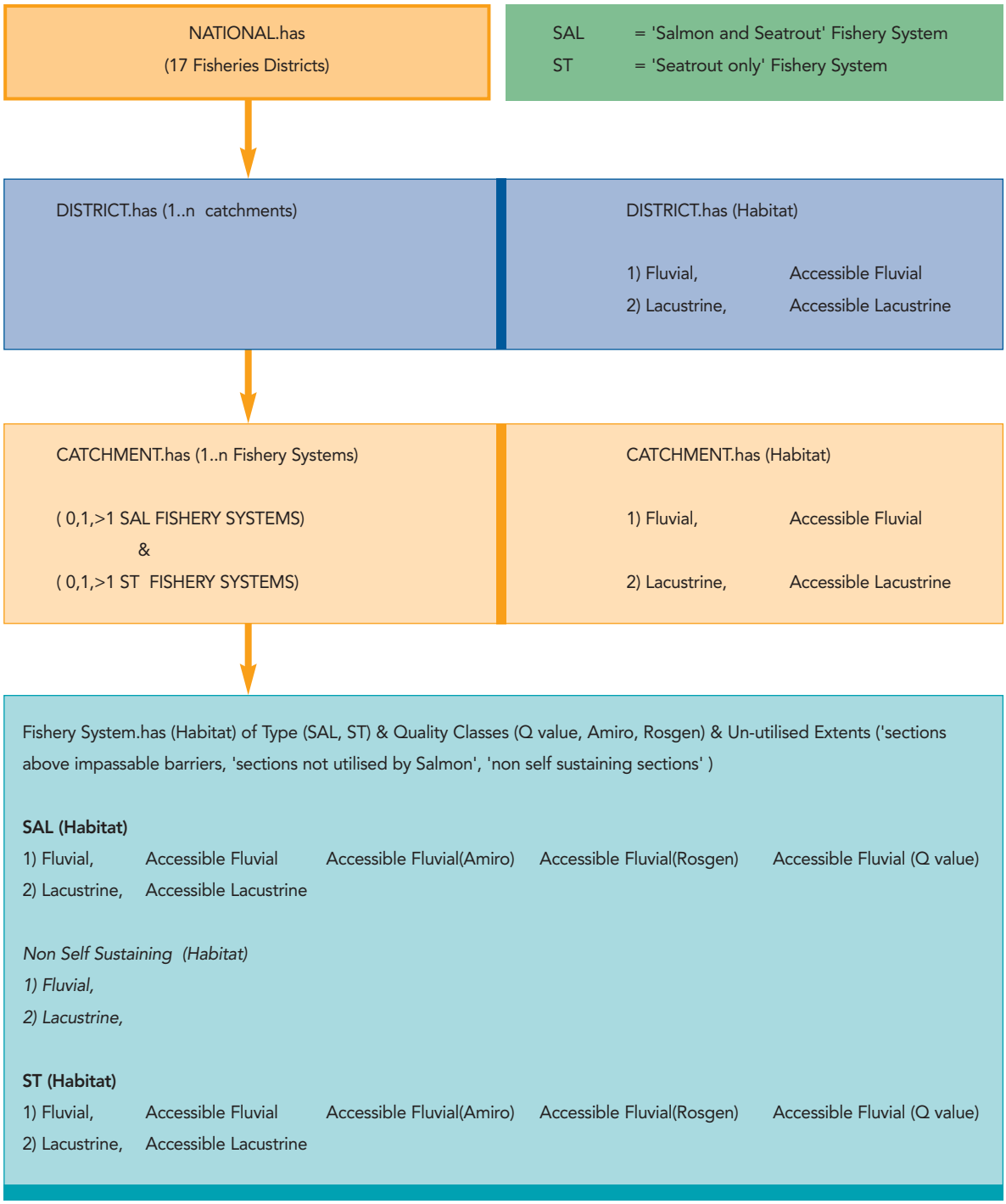


Figure 2 Hierarchy of Habitat Assessment functions performed within each Fisheries District.



2.1.5 Identification of Fishery Systems

The RiverSegment Class data set contains 3,169 river elements that discharge to the sea. Very many of these are small first or second order streams draining very small catchment areas, however some 201 within the jurisdiction of the Fisheries Districts are large enough systems to be shown as discrete catchments on the OSI "Rivers and their Catchment basins" (1958) map.

Staff from the Central Fisheries Board, in conjunction with staff from the Regional Fisheries Boards, identified those river systems that were considered to hold biologically significant salmon and/or sea trout populations. These were subsequently coded in the GIS system as discharge points at the coastal High Water Mark together with a fishery type designation (one of two types : 'salmon and sea trout' or 'seatrout only'). Some 261 Fishery Systems have been identified of which 173 are recorded as 'salmon and sea trout' and 88 as 'sea trout only'.

It should be noted that a catchment might contain several distinct river systems, each with their own outfall to the sea (High Water Mark). For example, the Suir catchment is tidal for a distance in excess of 30 kms above Waterford City. Within this zone some nine Fishery Systems have been identified, each flowing individually to tidal waters, in addition to the main River Suir Fishery System. The tidal limit of the major salmon catchments (showing 4th order streams or greater) are shown in Fig 3.

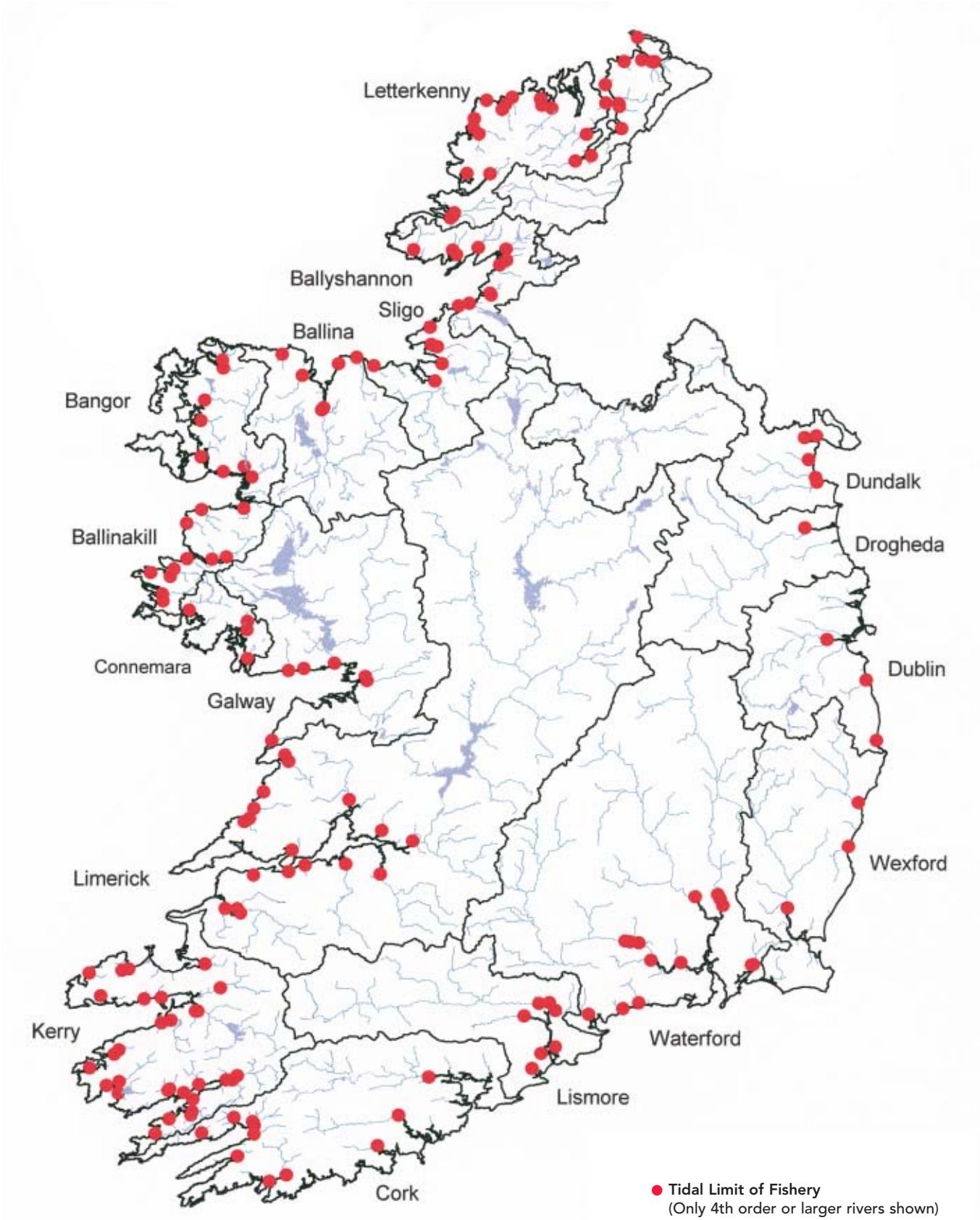
Within each Fishery System additional locations have been recorded to identify: 1) impassable barriers; 2) points above which the channels are not utilised by salmon; 3) points above which the Fishery System is considered to be 'non self sustaining' due to the presence of impounding dams and electricity generating facilities.

2.1.6 EPA Q Value Mapping

The EPA Biological River Monitoring Programme carries out a triennial survey of the biological elements of water quality at in excess of 3,300 monitoring stations on the main river channels. These surveys provide a biological quality rating or 'Q value' of waters at each monitoring station. Within their GIS the

Algae growing on salmon spawning beds can affect the survival of salmon eggs and fry and may reduce oxygen levels in the water during the hours of darkness

Figure 3 Salmon Fishery Systems



EPA has developed a facility to map the river stretches which correspond to the different Q value classes by a form of interpolation between the monitoring stations along the river network (**RiverSegment** Class). These data, on Q value area extent, are recorded in the EPA **RiverQValue** Class and are used to provide an estimate of wetted area within each Q value class, recorded in the field {q_value} in the **RiverSubReach** Class (section 2.2.6).

Bank tramppling caused by cattle reduces the amount of habitat available to salmon due to increased siltation and loss of pool areas

2.2 Analysis of Datasets

2.2.1 Calculation of River Segment Catchment Area

The calculation of the catchment contribution area to each reach was performed by the custom GIS automated function "catchment area" (Figure 1). This function uses the values in the fields {midpoint_x} and {midpoint_y} in the **RiverSegment** Class rivers data set to determine a location half way along the length of the reach. It then estimates the catchment area size at the location corresponding to this mid point in the 'flow accumulation' grid data set. The result was recorded in the field {us_area} of the **RiverSegment** Class data set.

2.2.2 Calculation of River Sub-Reach Width

The length of river and stream channels in the State measured from Ordnance Survey maps exceeds 70,000 km. The width of the channels however is not recorded on maps. Estimation of the wetted surface therefore requires a measure of stream width and how it varies along river systems.

Recording channel width to estimate area

Previous work undertaken by the Marine Institute, Central Fisheries Board and Compass Informatics in North Mayo (McGinnity et. al., 1999) has shown that a useful surrogate for exhaustive field surveys of river width can be achieved through the statistical analysis of map data. This is based on the relationship between stream width and other geographical factors including: 1) the length of upstream river; 2) upstream catchment area; 3) stream order; 4) local channel gradient. The study estimated the width of some 7,300 km of channel in North Mayo, or approximately 10% of the national resource.

The statistical formula (Table 1) developed in the North Mayo scenario was used in this project to estimate river width for all channels in each Fisheries District. Field based measurements of river width at 277 sites had been used in the development of this formula, however, this survey did not include channels with a stream order (Strahler,1952) greater than 5. Thus the formula can not be reliably used where channel stream order exceeds 5.

In the application of this formula throughout the Fisheries Districts, those channels with a stream order greater than 5 were given the same stream order component value as the 5th order channels. This will result in the partial underestimation of river width in 6th or greater order channels given that some 845km of channels (circa 1%) are 6th order or higher.

The estimation of wetted width for all channels in each Fisheries District was performed by the custom GIS automated function "predict width" (Figure 1). This function used values in the fields {order}; {us_len}; {us_area} in the **RiverSegment** Class river reach data set and the values in the field {Rosgen} in the **RiverSubReach** Class river sub-reach data set. The out put value of the estimation of river width was recorded in the field {wet_width} in the **RiverSubReach** Class.

Table 1. Model for Log(10) wetted width

Term	Estimate	Std Error	T Ratio	Prob>[t]
Intercept	-0.600894	0.177077	-3.39	0.0008
Lgorder_tot [a]	0.4258969	0.087832	4.35	<.0001
Lgcat_area [b]	-0.118969	0.059373	-2.00	0.0461
Order2 [c]	-0.00773	0.051184	-0.15	0.8801
Order3	0.0377428	0.055776	0.68	0.4992
Order4	0.1421142	0.075417	1.88	0.0606
Order5	0.2615957	0.098387	2.66	0.0083
ClassRO2 [d]	0.1990257	0.078854	2.52	0.0122
ClassRO3	0.2896542	0.073056	3.96	<.0001
ClassRO4	0.2411348	0.072912	3.31	0.0011

[A] log(10) of the total length of channel upstream of the reach

[B] log(10) of the catchment area upstream of the reach

[C] stream order categories up to 5th order

[D] sub-reach gradient classification: -

ClassRO1 < 2% ;

ClassRO2 2% - <4%;

ClassRO3 4% - <10%;

ClassRO4 >= 10%

Summary of Fit

Rsquare	0.649326
Rsquare adj	0.637505
Observations	277

Note: The model used in the current analysis of stream width was determined in a previous project McGinnity et al., (1999) using the measured wetted channel width at 277 locations from the North-West of Ireland. Consequently a certain amount of caution must be exercised in the application of this data in developing a national model. It is recommended that new data from other geographical regions be collected and input to increase the robustness of the current geographical model.

2.2.3 Calculation of Extent of Anadromy within Fishery Systems

The habitat area of each Fishery System within each catchment and subsequently within each Fisheries District was determined using network analysis on the combined RiverSegment and Lakes Class data sets. This network analysis utilises software components previously developed by Compass Informatics (McGinnity, *et al.*, 1999).

The geographical starting point for the network analysis of each Fishery System was the point located at the coastal High Water Mark, recorded in the **SeaPoint_FB** Class. This point data set recorded the Fishery Identification Code (1 to 261) for each system and the Fishery Type ("salmon and sea trout" or "sea trout only").

Limits to anadromy or salmon utilisation of channels were determined dynamically during the network analysis by cross-reference to locations previously determined and recorded in the **Barrier** Class data set. This Barrier data set recorded the location of: 1) impassable barriers; 2) points above which the channels are not utilised by Salmon; 3) points above which the Fishery System is considered to be 'non self sustaining' due to the presence of impounding dams and electricity generating facilities.

Mapping of the extent of anadromy within the Fishery Systems was performed by the custom GIS automated function "map anadromy" (Figure 1), performed individually for each Fisheries District.

The results of the analysis carried out were recorded in the **RiverSegment** and **Lakes** Classes - the Fishery Identification Code for each system is recorded in the field {cfb_code}; the Fishery Type is recorded in the field {cfb_type}; the channel or lake type is recorded in the field {riv_type} or {lake_type} and the position of the Barrier Class points along the rivers is recorded in the field {barr_meas}.

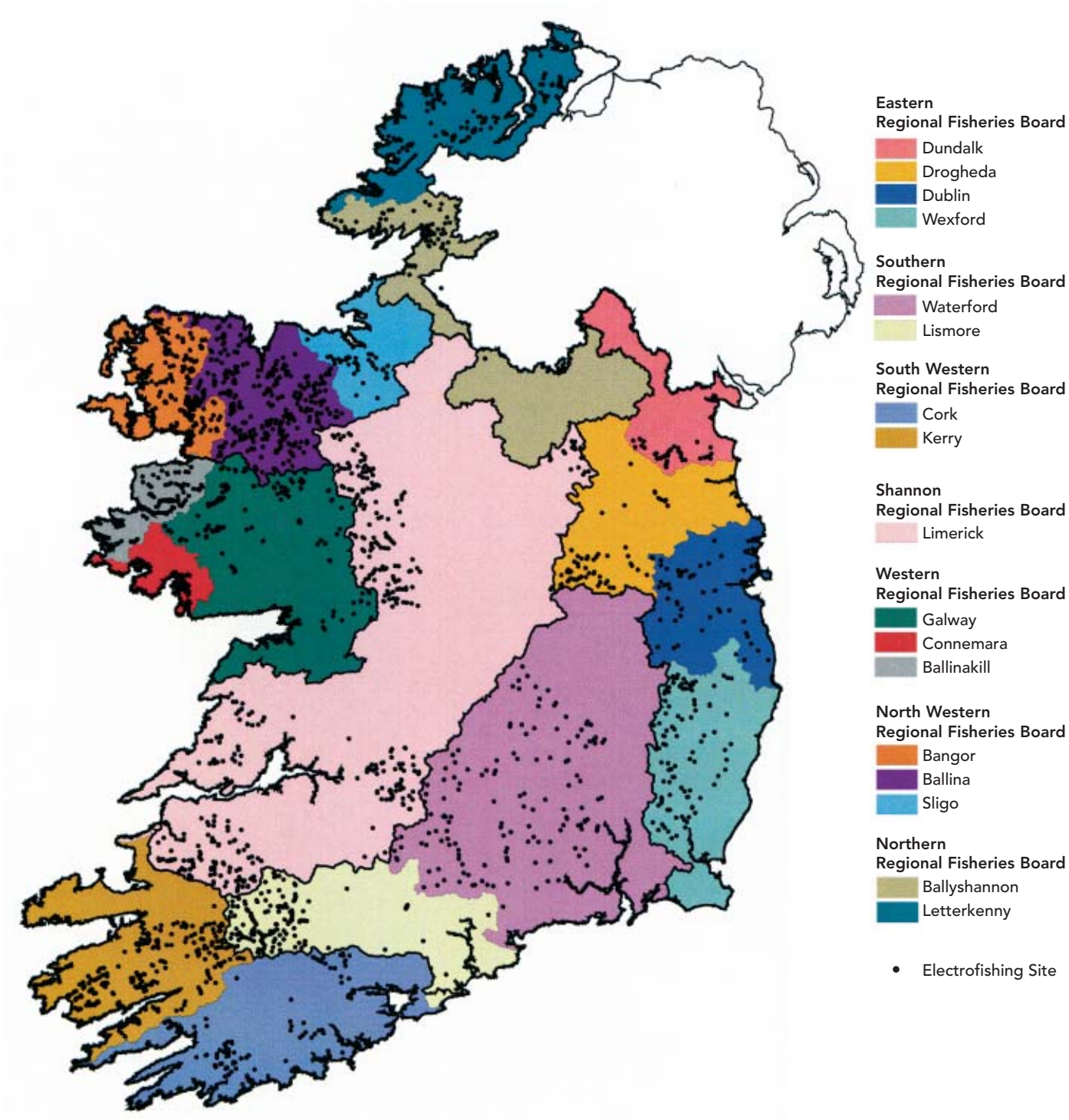
The categories of values in the fields {riv_type} and {lake_type} subsequent to the network analysis are:

"n.a."	on 1st order streams and lakes drained by 1st order streams
"SAL"	where the river reach or lake is part of an accessible "Salmon and Seatrout" system
"ST"	where the river reach or lake is part of an accessible "Seatrout only" system
"(nss)"	where the river channel or lake is above an impoundment which creates a "non self sustaining"section of a Fishery System
"Complete"	where the river channel or lake is above an impassable barrier.
"no SAL"	where the river channel or lake is not utilised by salmon
"not"	a river channel or lake not considered a significant producer of anadromous salmonids.

2.2.4 National juvenile salmonid electro-fishing database.

Electro-fishing information from approximately 1,500 sites were entered into the CFB national database as part of the project. All electro-fishing sites contained within the database were geo-referenced and mapped within the CFB GIS (Fig 4). The GIS was subsequently interrogated to confirm the presence or absence

Figure 4 CFB fish database output showing Fisheries Districts with electrofishing site locations (1982-2003) where the extent of salmon anadromy was tested (n=2614)



Electro-fishing survey in a headwater stream

of salmon above candidate barriers identified by the Regional Fisheries Boards using the ArcView© query analysis tool. First order streams were not considered in this analysis.

2.2.5 Calculation of Wetted Area in Fishery Systems

The estimation of wetted area for all channels in each Fisheries District was performed by a sub module of the custom GIS automated function "predict width" (Figure 1). This function uses values in the fields {length} & {wet-width} in the **RiverSubReach** Class river sub-reach data set in a simple multiplication function and the computed value was recorded in the field {wet_area} in the **RiverSubReach** Class.

Adult brown trout (top) and juvenile salmon

2.2.6 Calculation of EPA Q value proportions of Wetted Area

The EPA Biological quality rating or 'Q value' along the river network is recorded in the **RiverQValue** Class data set. The custom GIS automated function "RiverSubReach Q Value" determines the Q value for each sub-reach in the **RiverSubReach** Class by geographical cross-reference to the corresponding element of the RiverQValue Class. The results are recorded in the field {q_value} of the **RiverSubReach** Class.

2.2.7 Mapping anadromy on a Fisheries District basis

The maps are developed by the custom GIS automated function "District Anadromy Maps" which utilises the **RiverSegment, RiverSubReach, Lakes, Seapoint_FB, Barrier** and **OS_Catchment_District** Classes.

A summary map of each Fisheries District showing the designation of rivers and lakes, tidal limits and barriers in each Fishery System is presented in Appendix 35. The maps indicate the extent of anadromy within each Fishery System, the Fishery System type and the fluvial and lacustrine habitat designations. Impassable barriers are indicated as red squares.

Impoundments created to divert water can block the upstream migration of salmon

Channel sections upstream of impassible barriers are shown in light blue and are included in the calculation of the total wetted area (accessible and inaccessible combined). In some tributaries, even though there are no identifiable barriers, local Fisheries Board information suggests that these tributaries are not utilised by salmon, limited channel size being the most likely explanation. These tributaries are indicated in green and are included in the total wetted area estimates.

Four river catchments, the Shannon, Erne, Lee, and Liffey have large hydropower installations. Although these installations are technically passable (fish passes) by adult salmon, they are not considered to have self-sustaining salmon populations (O'Farrell *et al*, 1997; Anon, 2001). These rivers have been defined as non self-sustaining ('nss' in this report) and are indicated in orange in the map output, Appendix 35. Two statistics with regard to wetted area are provided in tables for these rivers, (a) the habitat up to the hydopower installation and (b) all habitat within the catchment.

Natural barrier to salmon migration on the River Eske

Catchments upstream of large hydropower stations, like the Erne at Ballyshannon, are not considered self-sustaining salmon systems

2.2.8 Selected GIS Map Outputs

A number of GIS generated map outputs are included in the report to demonstrate the range of fishery related map data which will be available nationally in due course. Examples of these outputs included in this report are:

- Rosgen Gradient classification (Letterkenny District) Figure 5.
- Amiro Gradient classification (Ballinakill District) Figure 6.
- EPA biotic Q value index (River Suir catchment) Figure 7 .
- Verification of the extent of salmon anadromy using electro-fishing data (Laune Catchment) Figure 8.

Figure 5 Rosgen gradient classification for the Letterkenny Fisheries District

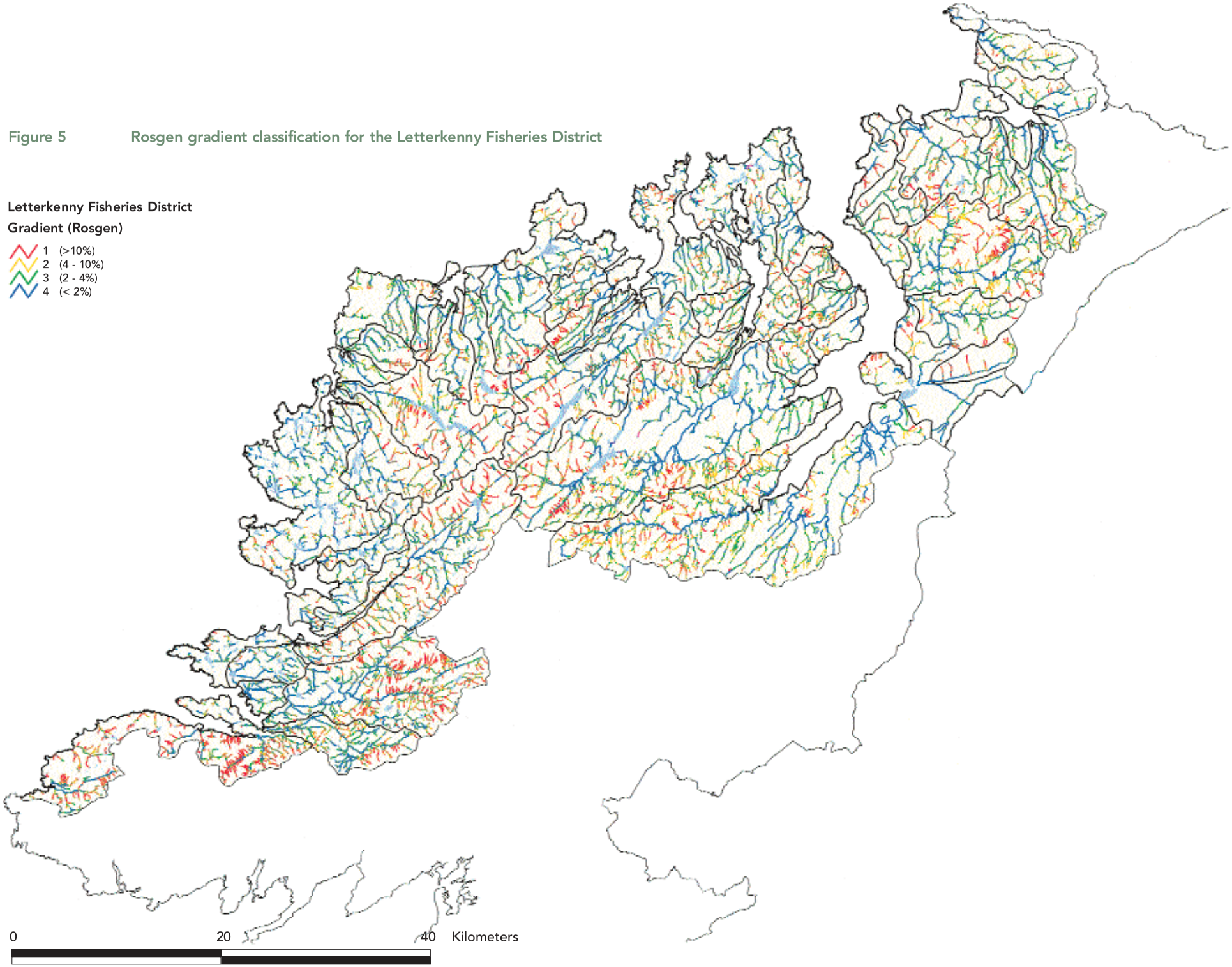


Figure 6 Amiro (1993) gradient classification for the Ballinakill Fisheries District

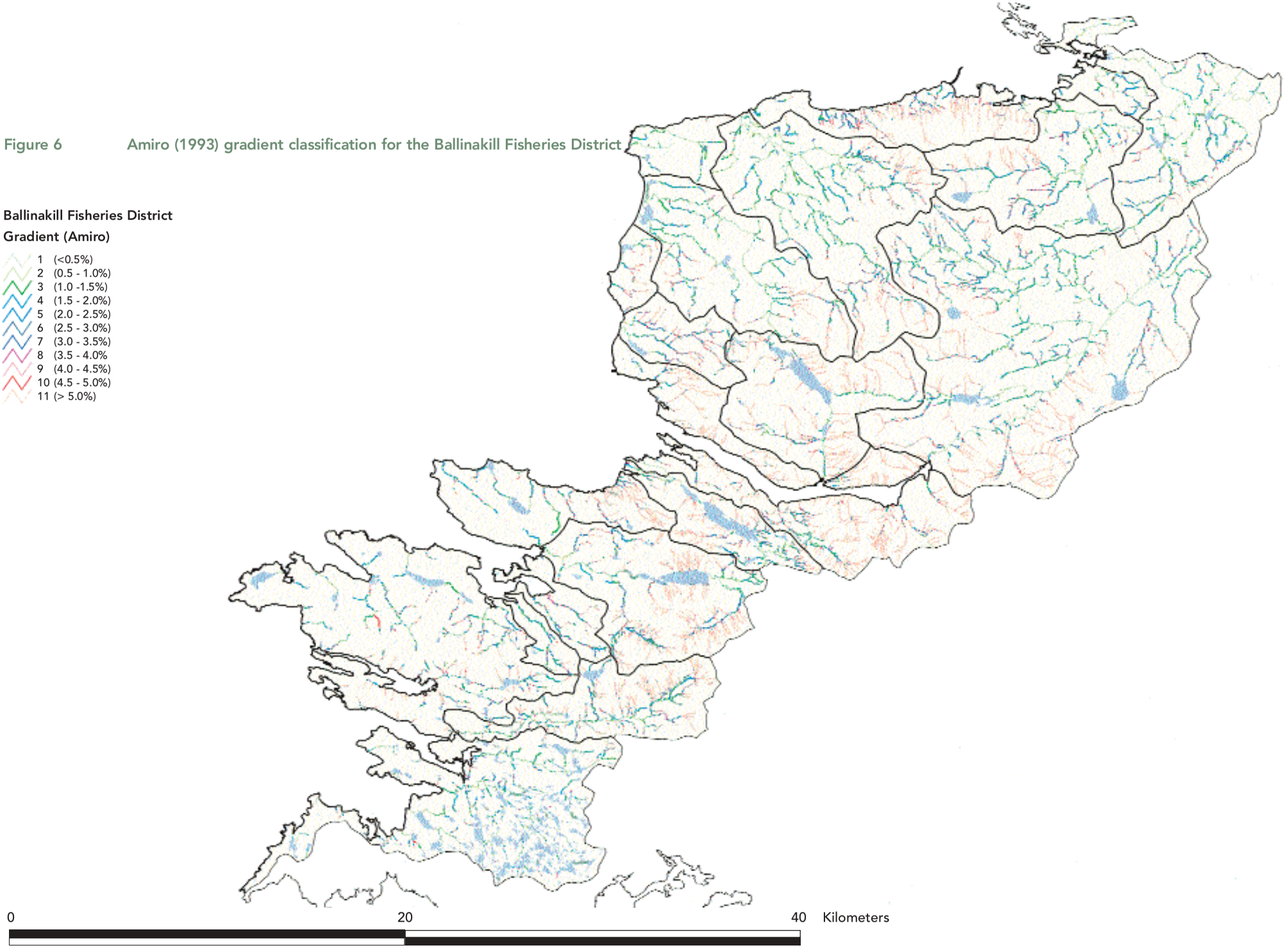


Figure 7 EPA Biotic 'Q' values for river segments in the River Suir Catchment

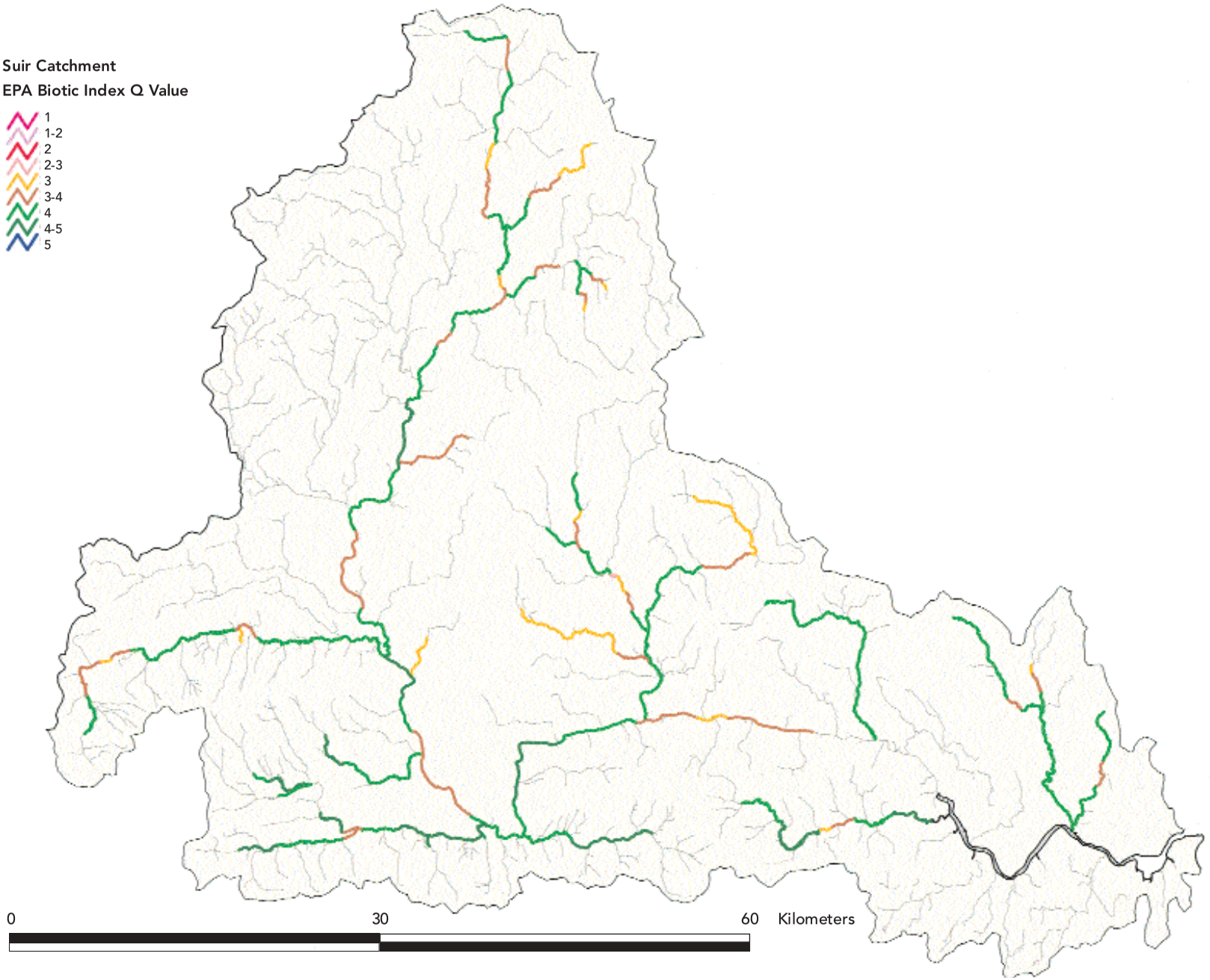
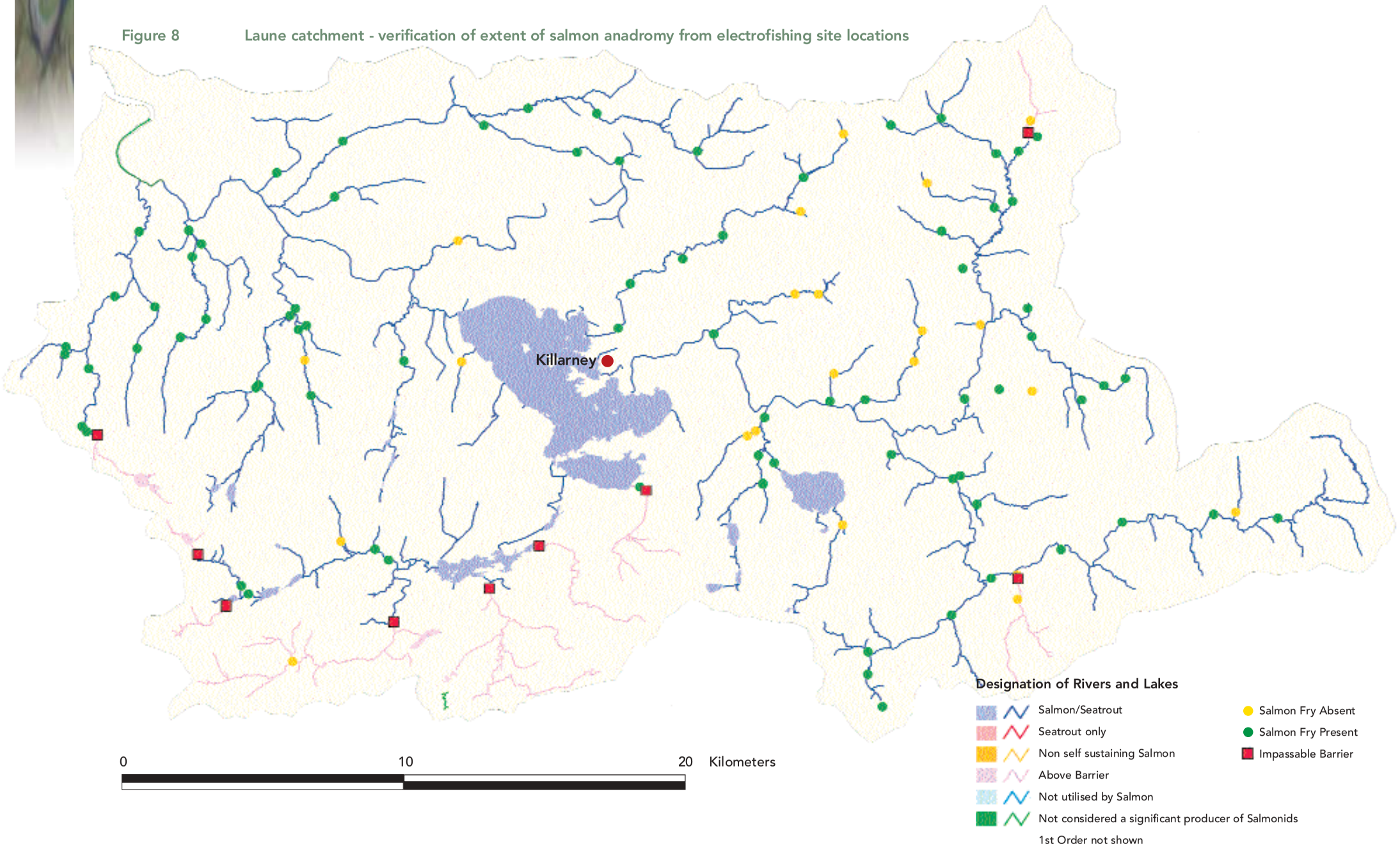


Figure 8 Laune catchment - verification of extent of salmon anadromy from electrofishing site locations



2.2.9 Construction of data output tables

Summary tables of wetted area estimates were developed dynamically by the custom GIS automated function "District Habitat tables" which utilises the **RiverSegment, RiverSubReach, Lakes, Seapoint_FB,** and **OS_ Catchment_ District Classes**. A summary of the hierarchy of Habitat Assessment functions performed for each Fisheries District is presented in Figure 2.

Each catchment is identified by the catchment name and number as shown on the OSI "Rivers and their Catchment Basins" (1958) map, the catchment surface area and the EPA Hydrometric Area code. These quantitative estimates of salmon riverine habitat data are ranked by Fisheries District in Table 3, and ranked on an individual fishery system basis in Table 4.

Statistics are provided on the quality of the accessible fluvial habitat. These quality elements relate to channel gradient (Rosgen and Amiro classifications) and to biological quality (EPA Q values) and are outlined in Table 2. Each system is identified by: 1) the Fishery System Identification Code and Fishery Type; 2) the OSI catchment name and number; 3) the OSI river name; 4) the EPA Hydrometric Area code, and EPA River Code if applicable.

The percentage of habitat with impaired water quality on a District basis is presented in Table 5. Data are presented on the quantity of habitat with a value of Q3 or less and a value of Q3/4 or less.

Table 2. Summary of Fluvial Habitat Quality elements

Box 1 shows the Rosgen and Amiro gradient classification schemes

Box 2 shows the EPA Biological Quality Rating (Q value)

***Box 1** - Gradient Classification Schemes*

Gradient Classification Scheme	Gradient
Rosgen Class 1	> 10%
Rosgen Class 2	4 - 10%
Rosgen Class 3	2 - 4%
Rosgen Class 4	< 2%
Amiro Class 1	≤ 0.5%
Amiro Class 2	> 0.5 ≤ 1%
Amiro Class 3	> 1 ≤ 1.5%
Amiro Class 4	> 1.5 ≤ 2%
Amiro Class 5	> 2 ≤ 2.5%
Amiro Class 6	> 2.5 ≤ 3%
Amiro Class 7	> 3 ≤ 3.5%
Amiro Class 8	> 3.5 ≤ 4%
Amiro Class 9	>4 ≤ 4.5%
Amiro Class 10	> 4.5 ≤ 5%
Amiro Class 11	> 5%

***Box 2** - Biological Quality Rating*

EPA Biological Quality Rating (Q value)	Q value Designation
1	Seriously Polluted
2	
2-3	Moderately Polluted
3	
3-4	
4	Slightly polluted
4-5	
5	Unpolluted

Estimates of Fluvial and Lacustrine Habitat

The data presented in the following Tables and Appendices contain estimates of fluvial and lacustrine habitat (both as accessible and inaccessible extents and in relation to water quality and gradient for the rivers) of the Fishery Systems.

The units of mapping employed in the GIS to derive these habitat estimates are metres (m^{-1}) for linear extents and square metres (m^2) for surface areas. Consequently the areas of habitat presented in the Tables are nominally in m^2.

It should not be inferred from the Tables that such habitat estimates have been reliably estimated at this level of detail.

The principal limitations to accuracy of the habitat estimates are:

1. The accuracy of the length of river channels recorded on the Ordnance Survey 1:50,000 scale maps;
2. The accuracy of the surface area of lakes recorded on the Ordnance Survey 1:50,000 scale maps;
3. The accuracy of stream gradient recorded in the Ordnance Survey photogrammetry datasets (section 2.1.3)
4. The accuracy of the mathematical formula used to predict the width of the rivers (section 2.2.2)
5. The accuracy and completeness of the recording of the limits of anadromy within the Fishery Systems (section 2.2.3)

The greatest improvement in the accuracy of the habitat estimates can be gained, in the first instance, from further field investigations to improve:

1. The prediction of stream width
2. The mapping of the extent of anadromy and actual salmonid utilisation of the river channels and lakes

3. Results

A total of 261 discrete migratory salmonid 'Fishery Systems' were identified nationally of which 173 are recorded as 'salmon and seatrout' and 88 as 'seatrout only'. Summary tables with estimates of total river wetted area and the accessible wetted area for each Fisheries District are presented, Table 3.

The estimated total wetted area of river and stream (fluvial) habitat in Ireland is 182 million m^2 of which 160 million m^2 is in 173 identified salmon systems. Within these systems, the analysis has estimated that 70.6% or approx 113 million is accessible to salmon. A total of 40.1 million m^2 of potential fluvial salmon habitat is located above the four major hydro-electric schemes.

Fisheries Districts are ranked by the quantity of accessible fluvial habitat for salmon in Table 3. The Waterford District has the greatest accessible fluvial habitat (24.3 million m^2) of the 17 national Fisheries Districts or 21.5% of the national total. Individual salmon systems are ranked by the quantity of accessible fluvial habitat in Table 4. The River Suir in the Waterford District has the largest quantity of accessible fluvial habitat in the country (8.8 million m^2) or 7.8% of the national total. The top ten rivers contain 52% of the total accessible fluvial salmon habitat in Ireland, Table 4.

Data on the proportion of impaired habitat from a water quality perspective in each District are presented, Table 5. Nationally, 17.3% of accessible habitat in salmon systems is at least 'slightly polluted' (Q3/4) while 4.5% of salmon habitat is at least 'moderately polluted' (Q3).

A total of 1,056 million m^2 of lacustrine habitat was identified on a ranked District basis in the 173 salmon systems (Table 6). 446 million m^2 of this habitat is available for migratory salmonid production. The Galway District accounts for 40% of the accessible habitat. Lacustrine habitat is ranked based on accessibility on an individual fishery system basis, Table 7. Not surprisingly, the Corrib system has the largest quantity of accessible lacustrine habitat.

Statistics are presented on fluvial and lacustrine habitat for each fishery system on a District basis in Tables 8-24. Data is presented on both salmon and sea trout 'Fishery Systems' and sea trout only 'Fishery Systems' on a District basis.

The GIS was interrogated to confirm the presence or absence of salmon fry above candidate barriers identified by the Central and Regional Fisheries Boards using the ArcView© query analysis tool. First order streams were not considered in this analysis. Only three locations were identified where fry were present upstream of designated impassable barriers. It is evident from the data that two barriers were passable and it was noted that salmon fry recorded above the third barrier had been stocked.

Appendices 1 to 34 present an overall summary of information for each river within each Fisheries District. At the OS catchment level, statistics are presented on the extent of the total and accessible riverine and lacustrine habitat for all identified catchments. At the Fishery System level statistics are presented on the extent of the total and accessible riverine and lacustrine habitat, Q value data at fishery system level and gradient at the fishery system level.

Table 3. Quantitative estimate of national salmon riverine habitat: wetted river channel, accessible to salmon, ranked by area (m^2) in Fisheries Districts

FISHERIES DISTRICT	All fluvial habitat (excluding 1st order streams)	Salmon systems - fluvial total	Salmon systems - fluvial accessible	Non-self sustaining (nss) portion of salmon bearing catchment	% of District fluvial systems accessible to salmon as a % of the national salmon fluvial accessible total
Waterford	25,633,775	24,569,103	**24,345,915**		21.55
Limerick	48,408,464	46,450,964	**14,394,975**	30,895,619	12.74
Lismore	9,680,565	9,340,439	**9,314,020**		8.24
Ballina	9,943,670	9,301,174	**8,881,629**		7.86
Kerry	10,394,258	8,797,110	**8,522,449**		7.54
Wexford	8,968,691	7,161,341	**7,032,752**		6.22
Drogheda	7,558,802	6,695,412	**6,695,412**		5.93
Letterkenny	7,045,066	5,631,468	**5,337,762**		4.72
Galway	9,806,992	8,253,242	**5,307,431**		4.70
Cork	9,657,519	7,241,815	**4,715,328**	1,923,476	4.17
Sligo	4,699,420	4,200,104	**3,990,574**		3.53
Ballyshannon	11,332,044	10,178,849	**3,361,359**	6,457,264	2.97
Bangor	4,429,069	3,336,934	**3,239,957**		2.87
Dublin	6,008,893	3,967,758	**2,741,828**	830,129	2.43
Dundalk	5,064,685	2,436,340	**2,372,751**		2.10
Ballinakill	2,624,023	2,076,178	**1,934,183**		1.71
Connemara	1,156,527	867,759	**811,701**		0.72
National TOTAL	**182,412,463**	**160,505,990**	**113,000,026**	**40,106,488**	**100.00**

Notes: Fluvial habitat refers to all wetted area (m^2) of riverine channel (except 1st order streams) within a Fisheries District;

First order stream is a channel in the origin of a river before it coalesces with another channel;

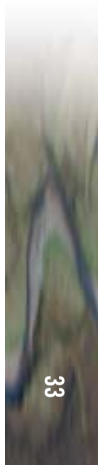
Salmon system refers to 173 rivers identified as 'fishery systems' with a self perpetuating salmon population

Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up the first impassable barrier.

Non-self sustaining describes catchments where access for salmon is impaired due to the presence of artificial barriers and where salmon production is usually maintained by stocking;

Table 4. Irish salmon rivers: wetted river channel statistics including total fluvial habitat (m^2), ranked by total fluvial habitat accessible to salmon

Rank	Fishery system	Fisheries District	OS Catchment Name	OS Catchment No.	Fisheries Board Coding	Total fluvial habitat (m^2)	Fluvial habitat accessible (m^2)	Fluvial habitat accessible to salmon per river as a % of national fluvial accessible	Cumulative fluvial habitat accessible to salmon per river as a % of total national fluvial accessible to salmon
1	Suir (River)	Waterford	(Suir)	182	43	8,911,096	8,795,447	7.78	7.78
2	Blackwater (River)	Lismore	(Blackwater)	190	59	7,728,122	7,701,703	6.82	14.60
3	Moy (River)	Ballina	(Moy)	110	195	7,495,504	7,075,959	6.26	20.86
4	Nore (River)	Waterford	(Nore)	184	38	6,796,230	6,796,230	6.01	26.88
5	Boyne (River)	Drogheda	(Boyne)	159	8	6,695,412	6,695,412	5.93	32.80
6	Barrow (River)	Waterford	(Barrow)	183	37	6,548,527	6,495,633	5.75	38.55
7	Slaney (River)	Wexford	(Slaney)	175	31	4,945,255	4,945,255	4.38	42.93
8	Corrib (River)	Galway	(Corrib)	143	147	6,719,329	4,038,058	3.57	46.50
9	Shannon (River)	Limerick	(Shannon)	155a/b,156,157	128	35,757,947	3,702,750	3.28	49.78
10	Maigue (River)	Limerick	(Shannon Est Sth)	155d	126	2,437,307	2,437,307	2.16	51.93
11	Liffey (River)	Dublin	(Liffey)	168	15	3,444,930	2,308,361	2.04	53.98
12	Laune (River)	Kerry	(Laune)	207	106	2,482,704	2,265,312	2.00	55.98
13	Ballysadare (River)	Sligo	(Ballysadare)	116	202	2,301,152	2,190,538	1.94	57.92
14	Feale (River)	Limerick	(Feale)	194	119	2,020,036	2,019,244	1.79	59.71
15	Bandon (River)	Cork	(Bandon)	229	69	1,663,070	1,652,104	1.46	61.17
16	Avoca (River)	Wexford	(Ovoca)	171	26	1,766,724	1,638,135	1.45	62.62
17	Deel (River)	Limerick	(Shannon Est Sth)	155d	125	1,502,689	1,502,689	1.33	63.95
18	Owenmore (River)	Bangor	(Owenmore)	105	186	1,386,308	1,386,308	1.23	65.17
19	Garvogue (River)	Sligo	(Garvogue)	117	203	1,376,884	1,376,884	1.22	66.39
20	Fergus (River)	Limerick	(Fergus)	158	131	1,270,553	1,270,553	1.12	67.52
21	Leannan (River)	Letterkenny	(Leannan)	31	248	1,167,125	1,167,125	1.03	68.55
22	Lee (River)	Cork	(Lee)	228	66	3,221,156	1,139,285	1.01	69.56
23	Dee (River)	Dundalk	(Dee)	96	6	1,128,973	1,065,384	0.94	70.50
24	Maine (River)	Kerry	(Maine)	197	107	961,799	961,799	0.85	71.35



Rank	Fishery system	Fisheries District	OS Catchment Name	OS Catchment No.	Fisheries Board Coding	Total fluvial habitat (m^2)	Fluvial habitat accessible (m^2)	Fluvial habitat accessible to salmon per river as a % of national fluvial accessible	Cumulative fluvial habitat accessible to salmon per river as a % of total national fluvial accessible to salmon
25	Glyde (River)	Dundalk	(Glyde)	95	5	933,025	933,025	0.83	72.18
26	Bride (River)	Lismore	(Blackwater)	190	60	884,654	884,654	0.78	72.96
27	Roughty (River)	Kerry	(Roughty)	217	88	869,984	869,984	0.77	73.73
28	Kilcolgan (River)	Galway	(Kilcolgan)	145	145	857,525	857,525	0.76	74.49
29	Ilen (River)	Cork	(Ilen)	233	72	848,826	698,138	0.62	75.11
30	Eany (Water)	Ballyshannon	(Eany Water)	57	215	656,530	656,530	0.58	75.69
31	Owenduff	Bangor	(Owenduff)	106	185	645,812	645,812	0.57	76.26
32	Galey (River)	Limerick	(Feale)	194	120	629,442	629,442	0.56	76.82
33	Owenea (River)	Letterkenny	(Owenea)	50	223	630,856	616,966	0.55	77.36
34	Erriff (River)	Ballinakill	(Erriff)	131	168	665,301	606,758	0.54	77.90
35	Caragh (River)	Kerry	(Caragh)	208	104	586,454	586,454	0.52	78.42
36	Inagh (River)	Limerick	(Inagh)	149	142	574,980	574,980	0.51	78.93
37	Drowes (River)	Ballyshannon	(Drowes)	121	209	611,703	562,314	0.50	79.42
38	Cloonaghmore (River)	Ballina	(Cloonaghmore)	104	194	545,722	545,722	0.48	79.91
39	Easky (River)	Ballina	(Easky)	114	200	540,375	540,375	0.48	80.39
40	Owenmore (River)	Connemara	(Ballynahinch)	136	161	579,653	524,049	0.46	80.85
41	Newport (River)	Bangor	(Newport)	108	178	512,934	493,143	0.44	81.29
42	Brick (River)	Limerick	(Feale)	194	118	490,616	490,616	0.43	81.72
43	Brusna (River)	Ballina	(Moy)	110	196	466,431	466,431	0.41	82.13
44	Duff (River)	Ballyshannon	(Duff)	120	208	461,575	461,575	0.41	82.54
45	Owenagarney [Ratty] (River)	Limerick	(Coastal)	155c	130	459,282	459,282	0.41	82.95
46	Corock (River)	Waterford	(Corock)	180	33	450,615	450,615	0.40	83.35
47	Owenavorragh (River)	Wexford	(Owenavorragh)	177	28	449,362	449,362	0.40	83.74
48	Inny (River)	Kerry	(Inny)	212	98	436,214	436,214	0.39	84.13
49	Eske (River)	Ballyshannon	(Eask)	58	214	496,658	431,848	0.38	84.51

50	Sheen (River)	Kerry	(Sheen)	218	87	428,784	417,944	0.37	84.88
51	Clodiagh (River)	Waterford	(Suir)	182	44	417,450	417,450	0.37	85.25
52	Crana (River)	Letterkenny	(Crana)	9	253	433,536	383,036	0.34	85.59
53	Swilly (River)	Letterkenny	(Swilly)	51	249	394,241	380,213	0.34	85.93
54	Lackagh (River)	Letterkenny	(Lackagh)	27	240	436,109	375,778	0.33	86.26
55	Lee (River)	Kerry	(Lee)	196	117	367,655	367,655	0.33	86.59
56	Glen (River)	Ballyshannon	(Glen)	52	219	359,004	356,998	0.32	86.90
57	Blackwater (River)	Kerry	(Blackwater)	215	90	353,999	353,999	0.31	87.21
58	Dargle (River)	Dublin	(Dargle)	169	18	344,425	331,623	0.29	87.51
59	Finisk (River)	Lismore	(Blackwater)	190	57	294,352	294,352	0.26	87.77
60	Bunowen (River)	Ballinakill	(Bunowen)	127	172	329,659	291,177	0.26	88.03
61	Ardigeen (River)	Cork	(Argideen)	232	70	282,954	282,954	0.25	88.28
62	Mahon (River)	Waterford	(Mahon)	185	50	287,493	282,073	0.25	88.53
63	Owenboliska	Galway	(Owenboliska)	141	149	273,229	273,229	0.24	88.77
64	Dawros (River)	Ballinakill	(Dawros)	133	166	271,612	271,612	0.24	89.01
65	Owvane (River)	Cork	(Owvane)	226	78	326,629	267,210	0.24	89.24
66	Currane (River)	Kerry	(Cummeragh)	213	97	270,377	266,976	0.24	89.48
67	Glenamoy (River)	Bangor	(Glenamoy)	100	187	274,259	260,000	0.23	89.71
68	Gweebarra (River)	Letterkenny	(Gweebarra)	48	225	287,952	248,480	0.22	89.93
69	Sneem (River)	Kerry	(Sneem)	214	92	247,232	247,232	0.22	90.15
70	Doonbeg (River)	Limerick	(Doonbeg)	154	133	244,268	244,268	0.22	90.37
71	Fane (River)	Dundalk	(Fane)	94	4	238,298	238,298	0.21	90.58
72	Owenshagh (River)	Kerry	(Owenshagh)	221	85	224,097	224,097	0.20	90.78
73	Lingaun (River)	Waterford	(Suir)	182	41	221,793	221,793	0.20	90.97
74	Colligan (River)	Waterford	(Colligan)	188	53	217,306	217,306	0.19	91.16
75	Black Water	Waterford	(Suir)	182	39	263,393	214,168	0.19	91.35
76	Coomhola (River)	Cork	(Coomhola)	225	79	282,583	211,273	0.19	91.54
77	Oily (River)	Ballyshannon	(Oily)	55	216	210,618	210,618	0.19	91.73
78	Skivileen (River)	Limerick	(Creegh)	153	134	210,312	210,312	0.19	91.91
79	Womanagh (River)	Lismore	(Womanagh)	191	62	204,956	204,956	0.18	92.09
80	Croanshagh (River)	Kerry	(Croanshagh)	222	84	203,271	203,271	0.18	92.27

Rank	Fishery system	Fisheries District	OS Catchment Name	OS Catchment No.	Fisheries Board Coding	Total fluvial habitat (m^2)	Fluvial habitat accessible (m^2)	Fluvial habitat accessible to salmon per river as a % of national fluvial accessible	Cumulative fluvial habitat accessible to salmon per river as a % of total national fluvial accessible to salmon
81	Srahmore (River)	Bangor	(Srahmore)	107	179	259,032	196,105	0.17	92.45
82	Drumcliff (River)	Sligo	(Drumcliff)	119	205	226,737	195,882	0.17	92.62
83	White (River)	Limerick	(Shannon Est Sth)	155d	123	189,906	189,906	0.17	92.79
84	Owenglin (River)	Ballinakill	(Owenglin)	135	163	186,204	186,204	0.16	92.95
85	Isle (Burn)	Letterkenny	(Swilly)	51	250	183,078	183,078	0.16	93.12
86	Owentocker (River)	Letterkenny	(Owentocker)	56	222	204,263	182,949	0.16	93.28
87	Laghy (Stream)	Ballyshannon	(Stream)	59	213	181,228	181,228	0.16	93.44
88	Tay (River)	Waterford	(Tay)	186	51	179,556	179,556	0.16	93.60
89	Clady (River)	Letterkenny	(Clady)	23	229	195,006	179,023	0.16	93.76
90	Cashla (River)	Connemara	(Cashla)	138	152	179,316	178,862	0.16	93.91
91	Annageeragh (River)	Limerick	(Annageeragh)	152	135	171,443	171,443	0.15	94.07
92	Carrownisky (River)	Ballinakill	(Carrownisky)	128	171	184,686	170,599	0.15	94.22
93	Owenwee (River)	Ballinakill	(Owenwee)	126	173	177,468	169,326	0.15	94.37
94	Ballinglen (River)	Ballina	(Ballinglen)	102	193	162,656	162,656	0.14	94.51
95	Glengarriff (River)	Cork	(Glengariff)	219	80	162,540	162,540	0.14	94.65
96	Ballintra (River)	Ballyshannon	(Ballintra)	60	212	392,356	158,131	0.14	94.79
97	Bungosteen (River)	Ballyshannon	(Bungosteen)	54	217	175,143	154,911	0.14	94.93
98	Clonmany (River)	Letterkenny	(Clonmany)	4	256	151,703	151,703	0.13	95.07
99	Annagh (River)	Limerick	(Annagh)	150	137	147,418	147,418	0.13	95.20
100	Ray (River)	Letterkenny	(Ray)	3	236	168,605	146,332	0.13	95.33
101	Muingnabo (River)	Bangor	(Muingnabo)	98	188	142,564	142,564	0.13	95.45
102	Grange (River)	Sligo	(Coastal)	x5	207	141,987	141,987	0.13	95.58
103	Donagh (River)	Letterkenny	(Donagh)	6	258	141,449	141,449	0.13	95.70
104	Ferta (River)	Kerry	(Ferta)	210	102	132,368	132,368	0.12	95.82

105	Owenduff (River)	Waterford	(Owenduff)	181	34	128,171	128,171	0.11	95.93
106	Cloon (River)	Limerick	(Shannon Est Nth)	155e	132	127,310	127,310	0.11	96.05
107	Owenascaul (River)	Kerry	(Owenascaul)	200	109	125,295	125,295	0.11	96.16
108	Glennagannon (River)	Letterkenny	(Loughinn)	7	259	126,111	120,435	0.11	96.26
109	Ardrigole (River)	Cork	(Adrigole)	224	81	118,834	118,834	0.11	96.37
110	Aughyvackeen (River)	Limerick	(Inagh)	149	143	117,864	117,864	0.10	96.47
111	Gweedore (River)	Letterkenny	(Gweedore)	22	228	118,319	111,149	0.10	96.57
112	Bracky (River)	Letterkenny	(Coastal)	h6_38	221	109,650	109,650	0.10	96.67
113	Cottoners (River)	Kerry	(Laune)	207	105	116,938	109,263	0.10	96.76
114	Four Mile (Water)	Cork	(Four Mile Water)	237	76	108,207	108,207	0.10	96.86
115	Abbey (River)	Ballyshannon	(Erne)	123	211	107,691	107,691	0.10	96.96
116	Vartry (River)	Dublin	(Vartry)	170	21	178,403	101,844	0.09	97.05
117	Feohanagh (River)	Kerry	(Feoghanagh)	205	112	100,979	100,979	0.09	97.13
118	Bundorragha (River)	Ballinakill	(Bundorragha)	130	169	110,674	95,883	0.08	97.22
119	Mill (River)	Letterkenny	(Mill)	34	252	123,296	95,019	0.08	97.30
120	Behy (River)	Kerry	(Behy)	209	103	94,655	94,655	0.08	97.39
121	Finnihy (River)	Kerry	(Finnihy)	216	89	93,458	93,458	0.08	97.47
122	Glenshelane (River)	Lismore	(Blackwater)	190	58	92,191	92,191	0.08	97.55
123	Leaffony (River)	Ballina	(Coastal)	q5	198	90,486	90,486	0.08	97.63
124	Kealincha (River)	Kerry	(Kealincha)	223	82	88,633	88,633	0.08	97.71
125	Owengarve (River)	Bangor	(Coastal)	i5_32	181	86,608	86,608	0.08	97.79
126	Castletown (River)	Dundalk	(Castletown)	92	3	82,514	82,514	0.07	97.86
127	Emlagh (River)	Kerry	(Coastal)	t3_22	108	82,317	82,317	0.07	97.93
128	Tullaghobegly (River)	Letterkenny	(Tullaghobegly)	24	235	78,626	78,626	0.07	98.00
129	Licky (River)	Lismore	(Blackwater)	190	55	76,032	76,032	0.07	98.07
130	Screeb	Connemara	(Coastal)	r4	155	75,682	75,682	0.07	98.14
131	Burnfoot	Letterkenny	(Coastal)	d_39	251	75,179	75,179	0.07	98.20
132	Owreagh (River)	Kerry	(Sneem)	214	93	73,895	73,895	0.07	98.27
133	Glenna (River)	Letterkenny	(Glenna)	21	234	72,633	72,633	0.06	98.33
134	Culoort (River)	Letterkenny	(Coastal)	a nth	261	71,714	71,714	0.06	98.40

Rank	Fishery system	Fisheries District	OS Catchment Name	OS Catchment No.	Fisheries Board Coding	Total fluvial habitat (m^2)	Fluvial habitat accessible (m^2)	Fluvial habitat accessible to salmon per river as a % of national fluvial accessible	Cumulative fluvial habitat accessible to salmon per river as a % of total national fluvial accessible to salmon
135	Culfin (River)	Ballinakill	(Culfin)	132	167	75,147	69,199	0.06	98.46
136	Owenwee (River)	Ballyshannon	(Glen)	52	220	69,079	69,079	0.06	98.52
137	Straid (River)	Letterkenny	(Straid)	5	257	78,092	67,152	0.06	98.58
138	Owenmore (River)	Kerry	(Owenmore)	203	114	65,361	65,361	0.06	98.64
139	Derryart (River)	Letterkenny	(Carrownamaddy)	2	237	65,102	65,102	0.06	98.69
140	Lough Fadda (Stream)	Kerry	(Coastal)	h3	83	85,634	64,356	0.06	98.75
141	Knock (River)	Galway	(Knock)	142	148	62,281	62,281	0.06	98.81
142	Mealagh (River)	Cork	(Mealagh)	227	77	213,617	61,384	0.05	98.86
143	Tourig (River)	Lismore	(Blackwater)	190	61	60,132	60,132	0.05	98.91
144	Carhan (River)	Kerry	(Carhan)	211	101	59,917	59,917	0.05	98.97
145	Faymore (River)	Letterkenny	(Faymore)	25	238	57,865	57,865	0.05	99.02
146	Owencronahulla	Letterkenny	(Owencronahulla)	19	230	57,607	57,607	0.05	99.07
147	Ballyline (River)	Limerick	(Shannon Est Sth)	155d	121	57,023	57,023	0.05	99.12
148	Owennamarve (River)	Letterkenny	(Owenamarve)	47	226	56,359	56,359	0.05	99.17
149	Pollmounty (River)	Waterford	(Barrow)	183	35	55,719	55,719	0.05	99.22
150	Drumhallagh (River)	Letterkenny	(Drumhallagh)	32	246	53,740	53,740	0.05	99.27
151	Flurry (River)	Dundalk	(Ballymascanlan)	91	2	53,530	53,530	0.05	99.31
152	Owenerk (River)	Letterkenny	(Owenerk)	8	255	51,945	51,945	0.05	99.36
153	Cloonee (River)	Kerry	(Clonee)	220	86	65,639	51,564	0.05	99.40
154	Milltown (River)	Kerry	(Stream)	206	111	51,528	51,528	0.05	99.45
155	Emlaghmore (River)	Kerry	(Coastal)	o3_21	99	50,539	50,539	0.04	99.50
156	Aughnavaud (River)	Waterford	(Barrow)	183	36	47,332	47,332	0.04	99.54
157	Carney (River)	Sligo	(Coastal)	x5	206	46,726	46,726	0.04	99.58
158	Aille (River)	Galway	(Aille)	148	144	149,746	45,389	0.04	99.62
159	Glen (River)	Waterford	(Suir)	182	42	44,422	44,422	0.04	99.66

160	Tahilla (River)	Kerry	(Coastal)	l3	91	42,592	42,592	0.04	99.70
161	Glencorbly (River)	Limerick	(Shannon Est Sth)	155d	122	42,568	42,568	0.04	99.73
162	Dunneill (River)	Sligo	(Dunneill)	115	201	106,618	38,557	0.03	99.77
163	Ballinaboy (River)	Ballinakill	(Coastal)	t4_32	162	40,133	38,131	0.03	99.80
164	Glen (River)	Letterkenny	(Coastal)	n6	231	41,307	37,455	0.03	99.83
165	stream (L. Nafurnace)	Connemara	(Coastal)	r4	154	33,108	33,108	0.03	99.86
166	Scorid (River)	Kerry	(Scorid)	201	115	31,065	31,065	0.03	99.89
167	Clarinbridge (River)	Galway	(Clarin)	144	146	191,132	30,949	0.03	99.92
168	Cartron (River)	Bangor	(Coastal)	i5_33	183	29,417	29,417	0.03	99.94
169	Traheen (River)	Ballinakill	(Traheen)	134	165	18,672	18,672	0.02	99.96
170	Cleggan (River)	Ballinakill	(Coastal)	u4	164	16,622	16,622	0.01	99.98
171	Keal (Stream)	Cork	(Ilen)	233	73	13,399	13,399	0.01	99.99
172	Erne (River)	Letterkenny	(Erne)	122	210	6,457,264	10,436	0.01	100.00
173	Caol	Kerry	(Coastal)	o3_22	100	3,727	3,727	0.00	100.00
National total						**160,505,990**	**113,000,026**	**100**	

Notes: Fishery system refers to a discrete river channel which is delineated by a direct connection to the sea (high water mark)

OS Catchment Number - River catchment Number as defined in Ordnance Survey - Rivers and their catchment basins map

Fisheries Board Coding - Numbering system applied (in a clockwise direction) to each discrete salmon or sea trout bearing river in Ireland

Total fluvial habitat is the wetted area of riverine habitat within a river catchment (excluding 1st order streams)

Accessible means the extent of channel into which salmonids can migrate freely up to the first impassable barrier

Non-self sustaining describes catchments where access for salmon is impaired due to the presence of artificial barriers and where the populations are usually maintained by stocking

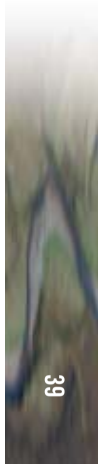


Table 5. EPA Q value data for total and accessible fluvial habitat in salmon systems

	TOTAL FLUVIAL HABITAT in SALMON SYSTEMS			ACCESSIBLE FLUVIAL HABITAT in SALMON SYSTEMS		
FISHERIES DISTRICT	Fluvial habitat total	EPA Q3 as a % of the District fluvial total	EPA Q3/4 as a % of the District fluvial total	Fluvial habitat accessible	EPA Q3 as a % of the Accessible District fluvial total	EPA Q3/4 as a % of the Accessible District fluvial total
Dundalk	2,436,340	2.9	27.3	2,372,751	3.0	26.1
Drogheda	6,695,412	12.4	46.9	6,695,412	12.4	46.9
Dublin	3,967,758	12.5	18.9	2,741,828	12.1	17.9
Wexford	7,161,341	6.0	21.6	7,032,752	6.1	22.0
Waterford	24,569,103	5.5	24.8	24,345,915	5.5	25.0
Lismore	9,340,439	2.3	20.1	9,314,020	2.3	20.2
Cork	7,241,815	2.3	9.6	4,715,328	3.5	14.1
Kerry	8,797,110	1.3	6.0	8,522,449	1.3	6.2
Limerick	46,450,964	7.0	33.0	14,394,975	6.9	17.4
Galway	8,253,242	7.5	20.8	5,307,431	6.0	18.6
Connemara	867,759	0.0	0.0	811,701	0.0	0.0
Ballinakill	2,076,178	0.4	4.4	1,934,183	0.4	4.7
Bangor	3,336,934	0.5	1.1	3,239,957	0.6	1.1
Ballina	9,301,174	2.1	6.6	8,881,629	1.3	6.0
Sligo	4,200,104	0.9	2.6	3,990,574	0.9	2.7
Ballyshannon	10,178,849	0.1	0.9	3,361,359	0.3	2.6
Letterkenny	5,631,468	1.5	4.3	5,337,762	1.5	4.5
National TOTAL	**160,505,990**	**4.9**	**20.9**	**113,000,026**	**4.5**	**17.3**

Notes: Fluvial habitat refers to all wetted area (m^2) of riverine channel (except 1st order streams) within a Fisheries District;

First order stream is a channel in the origin of a river before it coalesces with another channel;

Salmon system refers to 173 rivers identified as 'fishery systems' with a self perpetuating salmon population

Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up the first impassable barrier.

Non-self sustaining describes catchments where access for salmon is impaired due to the presence of artificial barriers and where salmon production is usually maintained by stocking;

Table 6. Lacustrine habitat for salmon in Fisheries Districts ranked by area (m^2) accessible to salmon

FISHERIES DISTRICT	All lacustrine habitat in salmon rivers	Accessible lacustrine habitat in salmon rivers	% of District accessible lacustrine habitat as a % of total national salmon accessible lacustrine habitat
Galway	283,202,813	177,472,441	39.76
Ballina	74,122,826	69,847,999	15.65
Kerry	58,520,473	56,607,695	12.68
Ballyshannon	92,513,368	28,714,469	6.43
Sligo	32,002,961	19,502,146	4.37
Letterkenny	20,450,397	19,392,136	4.34
Bangor	18,348,851	18,348,851	4.11
Connemara	18,023,298	17,323,803	3.88
Drogheda	13,221,896	13,221,896	2.96
Ballinakill	13,021,122	10,996,195	2.46
Limerick	392,185,102	10,502,205	2.35
Dundalk	1,591,368	1,591,368	0.36
Cork	14,022,420	1,314,679	0.29
Dublin	23,031,955	667,656	0.15
Wexford	1,973,710	444,985	0.10
Waterford	350,587	350,587	0.08
Lismore	34,401	34,401	0.01
Total	**1,056,617,548**	**446,333,512**	**100.00**

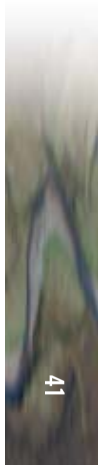
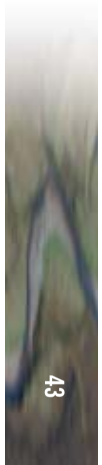


Table 7. Lacustrine habitat for salmon in salmon fishery systems in Ireland ranked by lacustrine habitat accessible to salmon

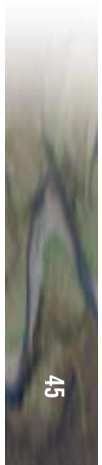
No.	Fishery system	Fisheries District	OS Catchment	OS Catchment No.	Fisheries Board Coding	Lacustrine habitat total	Lacustrine habitat accessible to salmon	Lacustrine habitat accessible to salmon as a % of national lacustrine accessible	Cumulative lacustrine accessible to salmon
	Corrib (River)	Galway	(Corrib)	143	147	276,932,006	171,210,357	38.36	38.4
2	Moy (River)	Ballina	(Moy)	110	195	72,868,341	68,593,514	15.37	53.7
3	Laune (River)	Kerry	(Laune)	207	106	28,418,286	27,969,380	6.27	60.0
4	Drowes (River)	Ballyshannon	(Drowes)	121	209	22,242,496	22,242,496	4.98	65.0
5	Garvogue (River)	Sligo	(Garvogue)	117	203	15,700,844	15,700,844	3.52	68.5
6	Currane (River)	Kerry	(Cummeragh)	213	97	15,547,809	15,274,805	3.42	71.9
7	Boyne (River)	Drogheda	(Boyne)	159	8	13,221,896	13,221,896	2.96	74.9
8	Owenmore (River)	Connemara	(Ballynahinch)	136	161	10,938,296	10,511,222	2.36	77.2
9	Owenmore (River)	Bangor	(Owenmore)	105	186	9,716,482	9,716,482	2.18	79.4
10	Caragh (River)	Kerry	(Caragh)	208	104	6,911,501	6,911,501	1.55	81.0
11	Fergus (River)	Limerick	(Fergus)	158	131	5,216,536	5,216,536	1.17	82.1
12	Leannan (River)	Letterkenny	(Leannan)	31	248	4,826,205	4,826,205	1.08	83.2
13	Srahmore (River)	Bangor	(Srahmore)	107	179	4,405,450	4,405,450	0.99	84.2
14	Lackagh (River)	Letterkenny	(Lackagh)	27	240	4,454,288	4,301,184	0.96	85.2
15	Newport (River)	Bangor	(Newport)	108	178	4,108,524	4,108,524	0.92	86.1
16	Eske (River)	Ballyshannon	(Eask)	58	214	4,263,573	3,964,506	0.89	87.0
17	Clady (River)	Letterkenny	(Clady)	23	229	3,665,464	3,352,520	0.75	87.7
18	Owenagarney [Ratty] (River)	Limerick	(Coastal)	155c	130	3,080,973	3,080,973	0.69	88.4
19	Cashla (River)	Connemara	(Cashla)	138	152	3,328,750	3,056,329	0.68	89.1
20	Kilcolgan (River)	Galway	(Kilcolgan)	145	145	3,010,720	3,010,720	0.67	89.8
21	Screeb	Connemara	(Coastal)	r4	155	2,978,435	2,978,435	0.67	90.4
22	Ballinaboy (River)	Ballinakill	(Coastal)	t4_32	162	3,656,925	2,948,602	0.66	91.1
23	Owenboliska	Galway	(Owenboliska)	141	149	2,681,862	2,681,862	0.60	91.7
24	Ballysadare (River)	Sligo	(Ballysadare)	116	202	15,156,100	2,655,285	0.59	92.3
25	Cloonee (River)	Kerry	(Clonee)	220	86	2,377,093	2,146,267	0.48	92.8
26	Bundorragha (River)	Ballinakill	(Bundorragha)	130	169	2,135,673	2,135,673	0.48	93.3
27	Culfin (River)	Ballinakill	(Culfin)	132	167	2,146,539	2,034,746	0.46	93.7

28	Dawros (River)	Ballinakill	(Dawros)	133	166	1,660,519	1,660,519	0.37	94.1
29	Gweedore (River)	Letterkenny	(Gweedore)	22	228	1,500,716	1,500,716	0.34	94.4
30	Annageeragh (River)	Limerick	(Annageeragh)	152	135	1,458,709	1,458,709	0.33	94.7
31	Behy (River)	Kerry	(Behy)	209	103	1,419,413	1,419,413	0.32	95.1
32	Tullaghobegly (River)	Letterkenny	(Tullaghobegly)	24	235	1,331,457	1,331,457	0.30	95.4
33	Owenea (River)	Letterkenny	(Owenea)	50	223	1,661,413	1,267,137	0.28	95.6
34	Owennamarve (River)	Letterkenny	(Owenamarve)	47	226	1,257,850	1,257,850	0.28	95.9
35	Easky (River)	Ballina	(Easky)	114	200	1,235,832	1,235,832	0.28	96.2
36	Abbey (River)	Ballyshannon	(Erne)	123	211	1,196,249	1,196,249	0.27	96.5
37	Drumcliff (River)	Sligo	(Drumcliff)	119	205	1,146,017	1,146,017	0.26	96.7
38	Glyde (River)	Dundalk	(Glyde)	95	5	1,142,900	1,142,900	0.26	97.0
39	Erriff (River)	Ballinakill	(Erriff)	131	168	1,712,382	985,075	0.22	97.2
40	stream (L. Nafurnace)	Connemara	(Coastal)	r4	154	777,817	777,817	0.17	97.4
41	Liffey (River)	Dublin	(Liffey)	168	15	20,209,909	664,779	0.15	97.5
42	Gweebarra (River)	Letterkenny	(Gweebarra)	48	225	758,254	650,429	0.15	97.7
43	Carrownisky (River)	Ballinakill	(Carrownisky)	128	171	602,285	602,285	0.13	97.8
44	Croanshagh (River)	Kerry	(Croanshagh)	222	84	600,056	600,056	0.13	97.9
45	Knock (River)	Galway	(Knock)	142	148	569,502	569,502	0.13	98.1
46	Bandon (River)	Cork	(Bandon)	229	69	556,405	556,405	0.12	98.2
47	Owenmore (River)	Kerry	(Owenmore)	203	114	543,775	543,775	0.12	98.3
48	Glengarriff (River)	Cork	(Glengariff)	219	80	534,956	534,956	0.12	98.4
49	Owenglin (River)	Ballinakill	(Owenglin)	135	163	466,039	466,039	0.10	98.5
50	Owenwee (River)	Ballyshannon	(Glen)	52	220	453,143	453,143	0.10	98.6
51	Avoca (River)	Wexford	(Ovoca)	171	26	1,960,344	431,619	0.10	98.7
52	Dee (River)	Dundalk	(Dee)	96	6	430,364	430,364	0.10	98.8
53	Scorid (River)	Kerry	(Scorid)	201	115	425,558	425,558	0.10	98.9
54	Inagh (River)	Limerick	(Inagh)	149	142	398,287	398,287	0.09	99.0
55	Blackwater (River)	Kerry	(Blackwater)	215	90	398,044	398,044	0.09	99.1
56	Oily (River)	Ballyshannon	(Oily)	55	216	376,826	376,826	0.08	99.2
57	Sneem (River)	Kerry	(Sneem)	214	92	296,178	296,178	0.07	99.3
58	Owenascaul (River)	Kerry	(Owenascaul)	200	109	256,564	256,564	0.06	99.3
59	Swilly (River)	Letterkenny	(Swilly)	51	249	237,707	237,707	0.05	99.4
60	Ardrigole (River)	Cork	(Adrigole)	224	81	218,644	218,644	0.05	99.4



No.	Fishery system	Fisheries District	OS Catchment	OS Catchment No.	Fisheries Board Coding	Lacustrine habitat total	Lacustrine habitat accessible to salmon	Lacustrine habitat accessible to salmon as a % of national lacustrine accessible	Cumulative lacustrine accessible to salmon
61	Ray (River)	Letterkenny	(Ray)	3	236	208,298	208,298	0.05	99.5
62	Suir (River)	Waterford	(Suir)	182	43	195,057	195,057	0.04	99.5
63	Roughty (River)	Kerry	(Roughty)	217	88	183,061	183,061	0.04	99.6
64	Glennagannon (River)	Letterkenny	(Loughinn)	7	259	181,149	181,149	0.04	99.6
65	Crana (River)	Letterkenny	(Crana)	9	253	161,244	161,244	0.04	99.6
66	Ballintra (River)	Ballyshannon	(Ballintra)	60	212	2,301,371	158,660	0.04	99.7
67	Laghy (Stream)	Ballyshannon	(Stream)	59	213	147,627	147,627	0.03	99.7
68	Skivileen (River)	Limerick	(Creegh)	153	134	139,532	139,532	0.03	99.7
69	Cleggan (River)	Ballinakill	(Coastal)	u4	164	113,543	113,543	0.03	99.8
70	Lough Fadda (Stream)	Kerry	(Coastal)	h3	83	767,433	103,156	0.02	99.8
71	Eany (Water)	Ballyshannon	(Eany Water)	57	215	102,600	102,600	0.02	99.8
72	Deel (River)	Limerick	(Shannon Est Sth)	155d	125	91,016	91,016	0.02	99.8
73	Nore (River)	Waterford	(Nore)	184	38	87,376	87,376	0.02	99.8
74	Owenduff	Bangor	(Owenduff)	106	185	77,875	77,875	0.02	99.9
75	Doonbeg (River)	Limerick	(Doonbeg)	154	133	67,632	67,632	0.02	99.9
76	Glen (River)	Ballyshannon	(Glen)	52	219	629,681	66,729	0.01	99.9
77	Owentocker (River)	Letterkenny	(Owentocker)	56	222	154,005	63,893	0.01	99.9
78	Black Water	Waterford	(Suir)	182	39	55,681	55,681	0.01	99.9
79	Maigue (River)	Limerick	(Shannon Est Sth)	155d	126	42,761	42,761	0.01	99.9
80	Cartron (River)	Bangor	(Coastal)	i5_33	183	40,520	40,520	0.01	99.9
81	Glenna (River)	Letterkenny	(Glenna)	21	234	36,282	36,282	0.01	99.9
82	Blackwater (River)	Lismore	(Blackwater)	190	59	34,401	34,401	0.01	99.9
83	Bunowen (River)	Ballinakill	(Bunowen)	127	172	132,740	31,929	0.01	100.0
84	Inny (River)	Kerry	(Inny)	212	98	29,401	29,401	0.01	100.0
85	Cottoners (River)	Kerry	(Laune)	207	105	322,055	26,290	0.01	100.0
86	Cloonaghmore (River)	Ballina	(Cloonaghmore)	104	194	18,653	18,653	0.00	100.0
87	Fane (River)	Dundalk	(Fane)	94	4	18,104	18,104	0.00	100.0

88	Owenwee (River)	Ballinakill	(Owenwee)	126	173	394,477	17,784	0.00	100.0
89	Owencronahulla	Letterkenny	(Owencronahulla)	19	230	16,065	16,065	0.00	100.0
90	Slaney (River)	Wexford	(Slaney)	175	31	13,366	13,366	0.00	100.0
91	Owenshagh (River)	Kerry	(Owenshagh)	221	85	13,268	13,268	0.00	100.0
92	Barrow (River)	Waterford	(Barrow)	183	37	12,473	12,473	0.00	100.0
93	Feohanagh (River)	Kerry	(Feoghanagh)	205	112	10,810	10,810	0.00	100.0
94	Shannon (River)	Limerick	(Shannon)	155a/b,156,157	128	381,689,656	6,759	0.00	100.0
95	Lee (River)	Cork	(Lee)	228	66	12,591,971	4,674	0.00	100.0
96	Bungosteen (River)	Ballyshannon	(Bungosteen)	54	217	239,144	3,187	0.00	100.0
97	Dargle (River)	Dublin	(Dargle)	169	18	2,877	2,877	0.00	100.0
98	Duff (River)	Ballyshannon	(Duff)	120	208	2,446	2,446	0.00	100.0
99	Tahilla (River)	Kerry	(Coastal)	l3	91	168	168	0.00	100.0
100	Brusna (River)	Ballina	(Moy)	110	196	0	0	0.00	100.0
101	Ballinglen (River)	Ballina	(Ballinglen)	102	193	0	0	0.00	100.0
102	Leaffony (River)	Ballina	(Coastal)	q5	198	0	0	0.00	100.0
103	Flurry (River)	Dundalk	(Ballymascanlan)	91	2	0	0	0.00	100.0
104	Castletown (River)	Dundalk	(Castletown)	92	3	0	0	0.00	100.0
105	Vartry (River)	Dublin	(Vartry)	170	21	2,819,169	0	0.00	100.0
106	Owenavorragh (River)	Wexford	(Owenavorragh)	177	28	0	0	0.00	100.0
107	Corock (River)	Waterford	(Corock)	180	33	0	0	0.00	100.0
108	Owenduff (River)	Waterford	(Owenduff)	181	34	0	0	0.00	100.0
109	Glen (River)	Waterford	(Suir)	182	42	0	0	0.00	100.0
110	Lingaun (River)	Waterford	(Suir)	182	41	0	0	0.00	100.0
111	Clodiagh (River)	Waterford	(Suir)	182	44	0	0	0.00	100.0
112	Aughnavaud (River)	Waterford	(Barrow)	183	36	0	0	0.00	100.0
113	Pollmounty (River)	Waterford	(Barrow)	183	35	0	0	0.00	100.0
114	Mahon (River)	Waterford	(Mahon)	185	50	0	0	0.00	100.0
115	Tay (River)	Waterford	(Tay)	186	51	0	0	0.00	100.0
116	Colligan (River)	Waterford	(Colligan)	188	53	0	0	0.00	100.0
117	Glenshelane (River)	Lismore	(Blackwater)	190	58	0	0	0.00	100.0
118	Finisk (River)	Lismore	(Blackwater)	190	57	0	0	0.00	100.0
119	Bride (River)	Lismore	(Blackwater)	190	60	0	0	0.00	100.0
120	Licky (River)	Lismore	(Blackwater)	190	55	0	0	0.00	100.0



No.	Fishery system	Fisheries District	OS Catchment	OS Catchment No.	Fisheries Board Coding	Lacustrine habitat total	Lacustrine habitat accessible to salmon	Lacustrine habitat accessible to salmon as a % of national lacustrine accessible	Cumulative lacustrine accessible to salmon
121	Tourig (River)	Lismore	(Blackwater)	190	61	0	0	0.00	100.0
122	Womanagh (River)	Lismore	(Womanagh)	191	62	0	0	0.00	100.0
123	Coomhola (River)	Cork	(Coomhola)	225	79	100,296	0	0.00	100.0
124	Owvane (River)	Cork	(Owvane)	226	78	0	0	0.00	100.0
125	Mealagh (River)	Cork	(Mealagh)	227	77	20,148	0	0.00	100.0
126	Ardigeen (River)	Cork	(Argideen)	232	70	0	0	0.00	100.0
127	Keal (Stream)	Cork	(Ilen)	233	73	0	0	0.00	100.0
128	Ilen (River)	Cork	(Ilen)	233	72	0	0	0.00	100.0
129	Four Mile (Water)	Cork	(Four Mile Water)	237	76	0	0	0.00	100.0
130	Lee (River)	Kerry	(Lee)	196	117	0	0	0.00	100.0
131	Maine (River)	Kerry	(Maine)	197	107	0	0	0.00	100.0
132	Milltown (River)	Kerry	(Stream)	206	111	0	0	0.00	100.0
133	Ferta (River)	Kerry	(Ferta)	210	102	0	0	0.00	100.0
134	Carhan (River)	Kerry	(Carhan)	211	101	0	0	0.00	100.0
135	Owreagh (River)	Kerry	(Sneem)	214	93	0	0	0.00	100.0
136	Finnihy (River)	Kerry	(Finnihy)	216	89	0	0	0.00	100.0
137	Sheen (River)	Kerry	(Sheen)	218	87	0	0	0.00	100.0
138	Kealincha (River)	Kerry	(Kealincha)	223	82	0	0	0.00	100.0
139	Emlaghmore (River)	Kerry	(Coastal)	o3_21	99	0	0	0.00	100.0
140	Caol	Kerry	(Coastal)	o3_22	100	0	0	0.00	100.0
141	Emlagh (River)	Kerry	(Coastal)	t3_22	108	0	0	0.00	100.0
142	Aughyvackeen (River)	Limerick	(Inagh)	149	143	0	0	0.00	100.0
143	Annagh (River)	Limerick	(Annagh)	150	137	0	0	0.00	100.0
144	White (River)	Limerick	(Shannon Est Sth)	155d	123	0	0	0.00	100.0
145	Glencorbly (River)	Limerick	(Shannon Est Sth)	155d	122	0	0	0.00	100.0
146	Ballyline (River)	Limerick	(Shannon Est Sth)	155d	121	0	0	0.00	100.0
147	Cloon (River)	Limerick	(Shannon Est Nth)	155e	132	0	0	0.00	100.0

148	Galey (River)	Limerick	(Feale)	194	120	0	0	0.00	100.0
149	Feale (River)	Limerick	(Feale)	194	119	0	0	0.00	100.0
150	Brick (River)	Limerick	(Feale)	194	118	0	0	0.00	100.0
151	Clarinbridge (River)	Galway	(Clarin)	144	146	4,363	0	0.00	100.0
152	Aille (River)	Galway	(Aille)	148	144	4,360	0	0.00	100.0
153	Traheen (River)	Ballinakill	(Traheen)	134	165	0	0	0.00	100.0
154	Glenamoy (River)	Bangor	(Glenamoy)	100	187	0	0	0.00	100.0
155	Muingnabo (River)	Bangor	(Muingnabo)	98	188	0	0	0.00	100.0
156	Owengarve (River)	Bangor	(Coastal)	i5_32	181	0	0	0.00	100.0
157	Dunneill (River)	Sligo	(Dunneill)	115	201	0	0	0.00	100.0
158	Carney (River)	Sligo	(Coastal)	x5	206	0	0	0.00	100.0
159	Grange (River)	Sligo	(Coastal)	x5	207	0	0	0.00	100.0
160	Erne (River)	Ballyshannon	(Erne)	122	210	60,558,212	0	0.00	100.0
161	Derryart (River)	Letterkenny	(Carrownamaddy)	2	237	0	0	0.00	100.0
162	Faymore (River)	Letterkenny	(Faymore)	25	238	0	0	0.00	100.0
163	Drumhallagh (River)	Letterkenny	(Drumhallagh)	32	246	0	0	0.00	100.0
164	Mill (River)	Letterkenny	(Mill)	34	252	0	0	0.00	100.0
165	Clonmany (River)	Letterkenny	(Clonmany)	4	256	0	0	0.00	100.0
166	Straid (River)	Letterkenny	(Straid)	5	257	0	0	0.00	100.0
167	Isle (Burn)	Letterkenny	(Swilly)	51	250	0	0	0.00	100.0
168	Donagh (River)	Letterkenny	(Donagh)	6	258	0	0	0.00	100.0
169	Owenerk (River)	Letterkenny	(Owenerk)	8	255	0	0	0.00	100.0
170	Burnfoot	Letterkenny	(Coastal)	d_39	251	0	0	0.00	100.0
171	Bracky (River)	Letterkenny	(Coastal)	h6_38	221	0	0	0.00	100.0
172	Culoort (River)	Letterkenny	(Coastal)	a nth	261	0	0	0.00	100.0
173	Glen (River)	Letterkenny	(Coastal)	n6	231	0	0	0.00	100.0
TOTAL						**1,056,617,548**	**446,333,512**	**100**	

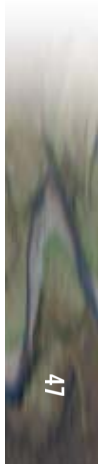


Table 8. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Dundalk Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Dundalk (SAL)						**2,436,340**	**2,372,751**	**1,591,368**	**1,591,368**
Dundalk	(Ballymascanlan)	91	Flurry (River)	SAL	2	53,530	53,530	0	0
Dundalk	(Castletown)	92	Castletown (River)	SAL	3	82,514	82,514	0	0
Dundalk	(Fane)	94	Fane (River)	SAL	4	238,298	238,298	18,104	18,104
Dundalk	(Glyde)	95	Glyde (River)	SAL	5	933,025	933,025	1,142,900	1,142,900
Dundalk	(Dee)	96	Dee (River)	SAL	6	1,128,973	1,065,384	430,364	430,364
Dundalk (ST only)						**97,569**	**97,569**	**23,896**	**23,896**
Dundalk	(Piedmont)	90	Castletown (River)	ST	1	97,569	97,569	23,896	23,896

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Table 9. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Drogheda Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Drogheda (SAL)						**6,695,412**	**6,695,412**	**13,221,896**	**13,221,896**
Drogheda	(Boyne)	159	Boyne (River)	SAL	8	6,695,412	6,695,412	13,221,896	13,221,896
Drogheda (ST only)						**705,707**	**705,707**	**1,207**	**1,207**
Drogheda	(Nanny)	160	Nanny (River)	ST	9	526,787	526,787	1,207	1,207
Drogheda	(Delvin)	162	Delvin (River)	ST	10	155,901	155,901	0	0
Drogheda	(Stream)	97	Termonfeckin	ST	7	23,019	23,019	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Dundalk Fisheries District

Table 10. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Dublin Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Dublin (SAL)						**3,967,758**	**2,741,828**	**23,031,955**	**667,656**
Dublin	(Liffey)	168	Liffey (River)	SAL	15	3,444,930	2,308,361	20,209,909	664,779
Dublin		*168*	*Liffey (River) (nss)*			*830,129*	*0*	*19,545,130*	*0*
Dublin	(Dargle)	169	Dargle (River)	SAL	18	344,425	331,623	2,877	2,877
Dublin	(Vartry)	170	Vartry (River)	SAL	21	178,403	101,844	2,819,169	0
Dublin (ST only)						**1,675,533**	**647,394**	**280,898**	**7,576**
Dublin	(Stream)	163	Ballough (Stream)	ST	11	95,015	95,015	0	0
Dublin	(Stream)	163	Ballyboghil	ST	12	109,677	109,677	0	0
Dublin	(Broad Meadow Water)	164	Broad Meadow (River)	ST	13	535,944	221,844	0	0
Dublin	(Tolka)	167	Tolka (River)	ST	14	409,580	50,959	0	0
Dublin	(Liffey)	168	Dodder (River)	ST	16	373,773	38,638	273,322	0
Dublin	(Vartry)	170	Rathnew (River)	ST	22	41,526	41,526	0	0
Dublin	(Coastal)	x1_10	Shanganagh	ST	17	54,352	54,352	7,576	7,576
Dublin	(Coastal)	y1	Newtownmountkennedy	ST	19	27,586	7,303	0	0
Dublin	(Coastal)	y1	Newcastle [Wicklow]	ST	20	28,080	28,080	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Dublin Fisheries District

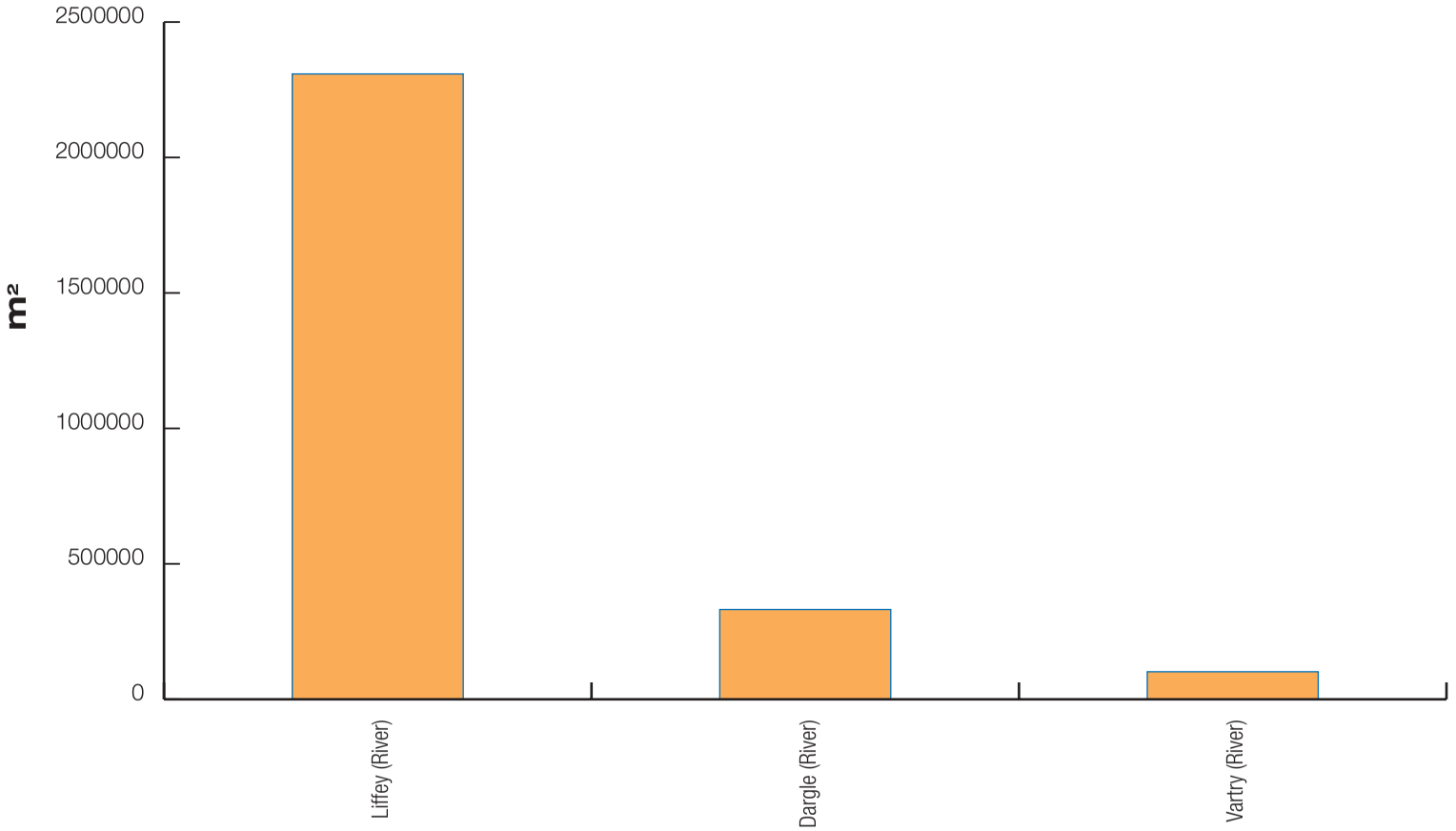


Table 11. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Wexford Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Wexford (SAL)						**7,161,341**	**7,032,752**	**1,973,710**	**444,985**
Wexford	(Ovoca)	171	Avoca (River)	SAL	26	1,766,724	1,638,135	1,960,344	431,619
Wexford	(Slaney)	175	Slaney (River)	SAL	31	4,945,255	4,945,255	13,366	13,366
Wexford	(Owenavorragh)	177	Owenavorragh (River)	SAL	28	449,362	449,362	0	0
Wexford (ST only)						**794,467**	**604,368**	**0**	**0**
Wexford	(Three Mile Water)	172	Three Mile Water	ST	23	46,506	46,506	0	0
Wexford	(Potters)	173	Potter's (River)	ST	24	102,307	102,307	0	0
Wexford	(Redcross)	174	Redcross (River)	ST	25	87,792	87,792	0	0
Wexford	(Clonough)	176	Inch (River)	ST	27	181,045	181,045	0	0
Wexford	(Sow)	178	Sow (River)	ST	30	190,384	285	0	0
Wexford	(Stream)	179	Duncormick	ST	32	106,546	106,546	0	0
Wexford	(Coastal)	f2_11	Blackwater (River)	ST	29	79,887	79,887	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Wexford Fisheries District

Table 12. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Waterford Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Waterford (SAL)						**24,569,103**	**24,345,915**	**350,587**	**350,587**
Waterford	(Corock)	180	Corock (River)	SAL	33	450,615	450,615	0	0
Waterford	(Owenduff)	181	Owenduff (River)	SAL	34	128,171	128,171	0	0
Waterford	(Suir)	182	Suir (River)	SAL	43	8,911,096	8,795,447	195,057	195,057
Waterford	(Suir)	182	Glen (River)	SAL	42	44,422	44,422	0	0
Waterford	(Suir)	182	Lingaun (River)	SAL	41	221,793	221,793	0	0
Waterford	(Suir)	182	Black Water	SAL	39	263,393	214,168	55,681	55,681
Waterford	(Suir)	182	Clodiagh (River)	SAL	44	417,450	417,450	0	0
Waterford	(Barrow)	183	Barrow (River)	SAL	37	6,548,527	6,495,633	12,473	12,473
Waterford	(Barrow)	183	Aughnavaud (River)	SAL	36	47,332	47,332	0	0
Waterford	(Barrow)	183	Pollmounty (River)	SAL	35	55,719	55,719	0	0
Waterford	(Nore)	184	Nore (River)	SAL	38	6,796,230	6,796,230	87,376	87,376
Waterford	(Mahon)	185	Mahon (River)	SAL	50	287,493	282,073	0	0
Waterford	(Tay)	186	Tay (River)	SAL	51	179,556	179,556	0	0
Waterford	(Colligan)	188	Colligan (River)	SAL	53	217,306	217,306	0	0
Waterford (ST only)						**585,417**	**478,792**	**576,503**	**293,067**
Waterford	(Suir)	182	Pil (River)	ST	40	140,879	140,879	3,630	3,630
Waterford	(Suir)	182	Ballymoat (Stream)	ST	47	45,406	45,406	0	0
Waterford	(Suir)	182	Dawn (River)	ST	45	107,997	1,372	283,436	0
Waterford	(Suir)	182	John's River	ST	48	124,693	124,693	0	0
Waterford	(Suir)	182	Whelanbridge (River)	ST	46	53,290	53,290	289,437	289,437
Waterford	(Dalligan)	187	Dalligan (River)	ST	52	42,019	42,019	0	0
Waterford	(Brickey)	189	Brickey (River)	ST	54	38,998	38,998	0	0
Waterford	(Coastal)	k2	Annestown (Stream)	ST	49	32,135	32,135	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Waterford Fisheries District

Table 13. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Lismore Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Lismore (SAL)						**9,340,439**	**9,314,020**	**34,401**	**34,401**
Lismore	(Blackwater)	190	Blackwater (River)	SAL	59	7,728,122	7,701,703	34,401	34,401
Lismore	(Blackwater)	190	Glenshelane (River)	SAL	58	92,191	92,191	0	0
Lismore	(Blackwater)	190	Finisk (River)	SAL	57	294,352	294,352	0	0
Lismore	(Blackwater)	190	Bride (River)	SAL	60	884,654	884,654	0	0
Lismore	(Blackwater)	190	Licky (River)	SAL	55	76,032	76,032	0	0
Lismore	(Blackwater)	190	Tourig (River)	SAL	61	60,132	60,132	0	0
Lismore	(Womanagh)	191	Womanagh (River)	SAL	62	204,956	204,956	0	0
Lismore (ST only)						**42,505**	**42,505**	**0**	**0**
Lismore	(Blackwater)	190	Goish (River)	ST	56	42,505	42,505	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Lismore Fisheries District

Table 14. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Cork Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Cork (SAL)						**7,241,815**	**4,715,328**	**14,022,420**	**1,314,679**
Cork	(Glengariff)	219	Glengarriff (River)	SAL	80	162,540	162,540	534,956	534,956
Cork	(Adrigole)	224	Adrigole (River)	SAL	81	118,834	118,834	218,644	218,644
Cork	(Coomhola)	225	Coomhola (River)	SAL	79	282,583	211,273	100,296	0
Cork	(Owvane)	226	Owvane (River)	SAL	78	326,629	267,210	0	0
Cork	(Mealagh)	227	Mealagh (River)	SAL	77	213,617	61,384	20,148	0
Cork	(Lee)	228	Lee (River)	SAL	66	3,221,156	1,139,285	12,591,971	4,674
Cork		*228*	*Lee (River) (nss)*			*1,923,476*	*0*	*12,587,297*	*0*
Cork	(Bandon)	229	Bandon (River)	SAL	69	1,663,070	1,652,104	556,405	556,405
Cork	(Argideen)	232	Ardigeen (River)	SAL	70	282,954	282,954	0	0
Cork	(Ilen)	233	Keal (Stream)	SAL	73	13,399	13,399	0	0
Cork	(Ilen)	233	Ilen (River)	SAL	72	848,826	698,138	0	0
Cork	(Four Mile Water)	237	Four Mile (Water)	SAL	76	108,207	108,207	0	0
Cork (ST only)						**1,097,452**	**1,097,452**	**141,605**	**141,605**
Cork	(Owennacurra)	192	Owennacurra (River)	ST	64	190,481	190,481	0	0
Cork	(Owennacurra)	192	Dungourney (River)	ST	63	77,927	77,927	0	0
Cork	(Glashaboy)	193	Glashaboy (River)	ST	65	293,429	293,429	6,361	6,361
Cork	(Owenboy)	230	Owenboy (River)	ST	67	240,054	240,054	0	0
Cork	(Stick)	231	Stick (River)	ST	68	78,845	78,845	0	0
Cork	(Roury)	234	Roury (River)	ST	71	67,418	67,418	135,244	135,244
Cork	(Leamawaddra)	235	Leamawaddra (River)	ST	74	45,350	45,350	0	0
Cork	(Bawnaknockane)	236	Bawnaknockane (River)	ST	75	103,948	103,948	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Cork Fisheries District

Table 15. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Kerry Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Kerry (SAL)						**8,797,110**	**8,522,449**	**58,520,473**	**56,607,695**
Kerry	(Lee)	196	Lee (River)	SAL	117	367,655	367,655	0	0
Kerry	(Maine)	197	Maine (River)	SAL	107	961,799	961,799	0	0
Kerry	(Owenascaul)	200	Owenascaul (River)	SAL	109	125,295	125,295	256,564	256,564
Kerry	(Scorid)	201	Scorid (River)	SAL	115	31,065	31,065	425,558	425,558
Kerry	(Owenmore)	203	Owenmore (River)	SAL	114	65,361	65,361	543,775	543,775
Kerry	(Feoghanagh)	205	Feohanagh (River)	SAL	112	100,979	100,979	10,810	10,810
Kerry	(Stream)	206	Milltown (River)	SAL	111	51,528	51,528	0	0
Kerry	(Laune)	207	Laune (River)	SAL	106	2,482,704	2,265,312	28,418,286	27,969,380
Kerry	(Laune)	207	Cottoners (River)	SAL	105	116,938	109,263	322,055	26,290
Kerry	(Caragh)	208	Caragh (River)	SAL	104	586,454	586,454	6,911,501	6,911,501
Kerry	(Behy)	209	Behy (River)	SAL	103	94,655	94,655	1,419,413	1,419,413
Kerry	(Ferta)	210	Ferta (River)	SAL	102	132,368	132,368	0	0
Kerry	(Carhan)	211	Carhan (River)	SAL	101	59,917	59,917	0	0
Kerry	(Inny)	212	Inny (River)	SAL	98	436,214	436,214	29,401	29,401
Kerry	(Cummeragh)	213	Currane (River)	SAL	97	270,377	266,976	15,547,809	15,274,805
Kerry	(Sneem)	214	Sneem (River)	SAL	92	247,232	247,232	296,178	296,178
Kerry	(Sneem)	214	Owreagh (River)	SAL	93	73,895	73,895	0	0
Kerry	(Blackwater)	215	Blackwater (River)	SAL	90	353,999	353,999	398,044	398,044
Kerry	(Finnihy)	216	Finnihy (River)	SAL	89	93,458	93,458	0	0
Kerry	(Roughty)	217	Roughty (River)	SAL	88	869,984	869,984	183,061	183,061
Kerry	(Sheen)	218	Sheen (River)	SAL	87	428,784	417,944	0	0
Kerry	(Clonee)	220	Cloonee (River)	SAL	86	65,639	51,564	2,377,093	2,146,267
Kerry	(Owenshagh)	221	Owenshagh (River)	SAL	85	224,097	224,097	13,268	13,268
Kerry	(Croanshagh)	222	Croanshagh (River)	SAL	84	203,271	203,271	600,056	600,056
Kerry	(Kealincha)	223	Kealincha (River)	SAL	82	88,633	88,633	0	0
Kerry	(Coastal)	h3	Lough Fadda (Stream)	SAL	83	85,634	64,356	767,433	103,156
Kerry	(Coastal)	l3	Tahilla (River)	SAL	91	42,592	42,592	168	168
Kerry	(Coastal)	o3_21	Emlaghmore (River)	SAL	99	50,539	50,539	0	0
Kerry	(Coastal)	o3_22	Caol	SAL	100	3,727	3,727	0	0
Kerry	(Coastal)	t3_22	Emlagh (River)	SAL	108	82,317	82,317	0	0

Kerry (ST only)						**242,911**	**242,911**	**283,035**	**283,035**
Kerry	(Owencashla)	199	Owencashla (River)	ST	116	55,887	55,887	283,035	283,035
Kerry	(Owenalondrig)	202	Owenalondrig (River)	ST	110	58,456	58,456	0	0
Kerry	(Owennafeana)	204	Owennafeana (River)	ST	113	45,520	45,520	0	0
Kerry	(Coastal)	m3	Coomnahorna (River)	ST	96	34,595	34,595	0	0
Kerry	(Coastal)	m3	Gowla (River)	ST	95	20,802	20,802	0	0
Kerry	(Coastal)	m3	Staigue (River)	ST	94	27,651	27,651	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Kerry Fisheries District

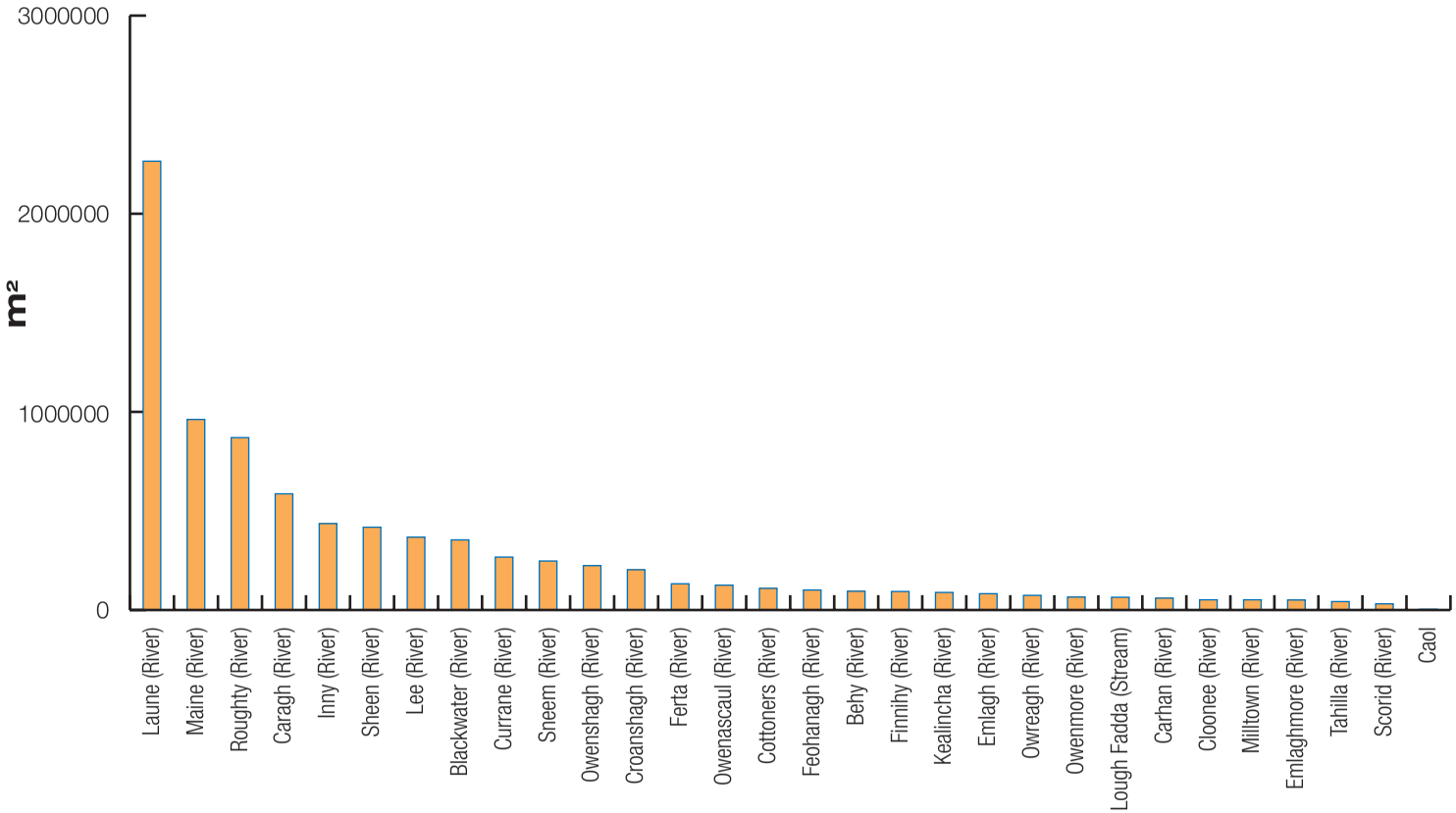


Table 16. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Limerick Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Limerick (SAL)						**46,450,964**	**14,394,975**	**148,674,268**	**10,502,205**
Limerick	(Inagh)	149	Inagh (River)	SAL	142	574,980	574,980	398,287	398,287
Limerick	(Inagh)	149	Aughyvackeen (River)	SAL	143	117,864	117,864	0	0
Limerick	(Annagh)	150	Annagh (River)	SAL	137	147,418	147,418	0	0
Limerick	(Annageeragh)	152	Annageeragh (River)	SAL	135	171,443	171,443	1,458,709	1,458,709
Limerick	(Creegh)	153	Skivileen (River)	SAL	134	210,312	210,312	139,532	139,532
Limerick	(Doonbeg)	154	Doonbeg (River)	SAL	133	244,268	244,268	67,632	67,632
Limerick	(Shannon)	155a/b,156,157	Shannon (River)	SAL	128	35,757,947	3,702,750	381,689,656	6,759
Limerick			*Shannon (River) (nss)*	*SAL*	*128*	*30,895,619*	*0*	*336,611,731*	*0*
Limerick	(Coastal)	155c	Owenagarney [Ratty] (River)	SAL	130	459,282	459,282	3,080,973	3,080,973
Limerick	(Shannon Est Sth)	155d	White (River)	SAL	123	189,906	189,906	0	0
Limerick	(Shannon Est Sth)	155d	Glencorbly (River)	SAL	122	42,568	42,568	0	0
Limerick	(Shannon Est Sth)	155d	Ballyline (River)	SAL	121	57,023	57,023	0	0
Limerick	(Shannon Est Sth)	155d	Deel (River)	SAL	125	1,502,689	1,502,689	91,016	91,016
Limerick	(Shannon Est Sth)	155d	Maigue (River)	SAL	126	2,437,307	2,437,307	42,761	42,761
Limerick	(Shannon Est Nth)	155e	Cloon (River)	SAL	132	127,310	127,310	0	0
Limerick	(Fergus)	158	Fergus (River)	SAL	131	1,270,553	1,270,553	5,216,536	5,216,536
Limerick	(Feale)	194	Galey (River)	SAL	120	629,442	629,442	0	0
Limerick	(Feale)	194	Feale (River)	SAL	119	2,020,036	2,019,244	0	0
Limerick	(Feale)	194	Brick (River)	SAL	118	490,616	490,616	0	0
Limerick (ST only)						**295,111**	**295,111**	**0**	**0**
Limerick	(Aughaveemagh)	151	Aughaveema	ST	136	41,375	41,375	0	0
Limerick	(Coastal)	155c	Crompaun (River)	ST	129	58,295	58,295	0	0
Limerick	(Shannon Est Sth)	155d	Ahacronane (River)	ST	124	55,540	55,540	0	0
Limerick	(Shannon Est Sth)	155d	Ballincurra (Creek)	ST	127	50,778	50,778	0	0
Limerick	(Coastal)	g4	Moy (River)	ST	141	35,853	35,853	0	0
Limerick	(Coastal)	g4	Freagh (River)	ST	140	13,118	13,118	0	0
Limerick	(Coastal)	g4	Cloonbony (River)	ST	138	40,152	40,152	0	0
Limerick	(Coastal)	g4	Ballyvaskin (River)	ST	139	0	0	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Limerick Fisheries District

Table 17. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Galway Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Galway (SAL)						**8,253,242**	**5,307,431**	**283,202,813**	**177,472,441**
Galway	(Owenboliska)	141	Owenboliska	SAL	149	273,229	273,229	2,681,862	2,681,862
Galway	(Knock)	142	Knock (River)	SAL	148	62,281	62,281	569,502	569,502
Galway	(Corrib)	143	Corrib (River)	SAL	147	6,719,329	4,038,058	276,932,006	171,210,357
Galway	(Clarin)	144	Clarinbridge (River)	SAL	146	191,132	30,949	4,363	0
Galway	(Kilcolgan)	145	Kilcolgan (River)	SAL	145	857,525	857,525	3,010,720	3,010,720
Galway	(Aille)	148	Aille (River)	SAL	144	149,746	45,389	4,360	0
Galway (ST only)						**86,963**	**86,963**	**1,786,987**	**1,786,987**
Galway	(Crumlin)	139	Crumlin (River)	ST	151	37,918	37,918	1,147,222	1,147,222
Galway	(Owenriff)	140	Owenriff [South Galway]	ST	150	49,045	49,045	639,765	639,765

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Galway Fisheries District

Table 18. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Connemara Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Connemara (SAL)						**867,759**	**811,701**	**18,023,298**	**17,323,803**
Connemara	(Ballynahinch)	136	Owenmore (River)	SAL	161	579,653	524,049	10,938,296	10,511,222
Connemara	(Cashla)	138	Cashla (River)	SAL	152	179,316	178,862	3,328,750	3,056,329
Connemara	(Coastal)	r4	stream (L. Nafurnace)	SAL	154	33,108	33,108	777,817	777,817
Connemara	(Coastal)	r4	Screeb	SAL	155	75,682	75,682	2,978,435	2,978,435
Connemara (ST only)						**202,244**	**202,244**	**6,298,597**	**6,298,597**
Connemara	(Owengowla)	137	Gowlabeg (River)	ST	159	14,574	14,574	117,475	117,475
Connemara	(Owengowla)	137	Owengowla	ST	160	73,797	73,797	1,329,859	1,329,859
Connemara	(Coastal)	r4	stream (L. Skannive)	ST	158	16,734	16,734	1,407,563	1,407,563
Connemara	(Coastal)	r4	stream (L. Inverbeg)	ST	156	18,606	18,606	920,628	920,628
Connemara	(Coastal)	r4	Invermore (River)	ST	157	76,805	76,805	2,385,715	2,385,715
Connemara	(Coastal)	r4	stream (L Carrafinla)	ST	153	1,728	1,728	137,357	137,357

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Connemara Fisheries District

Table 19. Listing of salmon and sea trout fluvial and lacustrine habitat quantity (m^2) in the Ballinakill Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Ballinakill (SAL)						**2,076,178**	**1,934,183**	**13,021,122**	**10,996,195**
Ballinakill	(Owenwee)	126	Owenwee (River)	SAL	173	177,468	169,326	394,477	17,784
Ballinakill	(Bunowen)	127	Bunowen (River)	SAL	172	329,659	291,177	132,740	31,929
Ballinakill	(Carrownisky)	128	Carrownisky (River)	SAL	171	184,686	170,599	602,285	602,285
Ballinakill	(Bundorragha)	130	Bundorragha (River)	SAL	169	110,674	95,883	2,135,673	2,135,673
Ballinakill	(Erriff)	131	Erriff (River)	SAL	168	665,301	606,758	1,712,382	985,075
Ballinakill	(Culfin)	132	Culfin (River)	SAL	167	75,147	69,199	2,146,539	2,034,746
Ballinakill	(Dawros)	133	Dawros (River)	SAL	166	271,612	271,612	1,660,519	1,660,519
Ballinakill	(Traheen)	134	Traheen (River)	SAL	165	18,672	18,672	0	0
Ballinakill	(Owenglin)	135	Owenglin (River)	SAL	163	186,204	186,204	466,039	466,039
Ballinakill	(Coastal)	t4_32	Ballinaboy (River)	SAL	162	40,133	38,131	3,656,925	2,948,602
Ballinakill	(Coastal)	u4	Cleggan (River)	SAL	164	16,622	16,622	113,543	113,543
Ballinakill (ST only)						**176,282**	**176,282**	**450,027**	**450,027**
Ballinakill	(Carrowbeg)	125	Carrowbeg (River)	ST	174	138,040	138,040	450,027	450,027
Ballinakill	(Owennadornaun)	129	Owennadornaun	ST	170	38,242	38,242	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Ballinakill Fisheries District

Table 20. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Bangor Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Bangor (SAL)						**3,336,934**	**3,239,957**	**18,348,851**	**18,348,851**
Bangor	(Glenamoy)	100	Glenamoy (River)	SAL	187	274,259	260,000	0	0
Bangor	(Owenmore)	105	Owenmore (River)	SAL	186	1,386,308	1,386,308	9,716,482	9,716,482
Bangor	(Owenduff)	106	Owenduff	SAL	185	645,812	645,812	77,875	77,875
Bangor	(Srahmore)	107	Srahmore (River)	SAL	179	259,032	196,105	4,405,450	4,405,450
Bangor	(Newport)	108	Newport (River)	SAL	178	512,934	493,143	4,108,524	4,108,524
Bangor	(Muingnabo)	98	Muingnabo (River)	SAL	188	142,564	142,564	0	0
Bangor	(Coastal)	i5_32	Owengarve (River)	SAL	181	86,608	86,608	0	0
Bangor	(Coastal)	i5_33	Cartron (River)	SAL	183	29,417	29,417	40,520	40,520
Bangor (ST only)						**494,507**	**494,507**	**789,265**	**789,265**
Bangor	(Rossow)	109	Owennabrockagh	ST	176	89,180	89,180	72,160	72,160
Bangor	(Rossow)	109	Rossow (River)	ST	177	35,528	35,528	43,663	43,663
Bangor	(Moyour)	124	Moyour (River)	ST	175	145,919	145,919	559,041	559,041
Bangor	(Coastal)	i5_32	Bunnahowna (River)	ST	182	22,792	22,792	0	0
Bangor	(Coastal)	i5_32	Carrowsallagh (River)	ST	180	25,479	25,479	0	0
Bangor	(Coastal)	i5_33	Bellagarvaun	ST	184	138,409	138,409	114,401	114,401
Bangor	(Coastal)	I5	Gweedaney	ST	189	37,200	37,200	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Bangor Fisheries District

Table 21. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Ballina Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Ballina (SAL)						**9,301,174**	**8,881,629**	**74,122,826**	**69,847,999**
Ballina	(Ballinglen)	102	Ballinglen (River)	SAL	193	162,656	162,656	0	0
Ballina	(Cloonaghmore)	104	Cloonaghmore (River)	SAL	194	545,722	545,722	18,653	18,653
Ballina	(Moy)	110	Moy (River)	SAL	195	7,495,504	7,075,959	72,868,341	68,593,514
Ballina	(Moy)	110	Brusna (River)	SAL	196	466,431	466,431	0	0
Ballina	(Easky)	114	Easky (River)	SAL	200	540,375	540,375	1,235,832	1,235,832
Ballina	(Coastal)	q5	Leaffony (River)	SAL	198	90,486	90,486	0	0
Ballina (ST only)						**220,066**	**220,066**	**388,858**	**388,858**
Ballina	(Glencullen)	101	Bellananaminnaun (River)	ST	192	61,519	61,519	0	0
Ballina	(Bellawaddy)	111	Bellawaddy (River)	ST	197	50,521	50,521	0	0
Ballina	(Finned)	113	Owenykeevan (River)	ST	199	49,622	49,622	0	0
Ballina	(Belderg)	99	Belderg (River)	ST	190	39,640	39,640	388,858	388,858
Ballina	(Coastal)	m5	Glenulra (River)	ST	191	18,764	18,764	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Ballina Fisheries District

Table 22. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Sligo Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Sligo (SAL)						**4,200,104**	**3,990,574**	**32,002,961**	**19,502,146**
Sligo	(Dunneill)	115	Dunneill (River)	SAL	201	106,618	38,557	0	0
Sligo	(Ballysadare)	116	Ballysadare (River)	SAL	202	2,301,152	2,190,538	15,156,100	2,655,285
Sligo	(Garvogue)	117	Garvogue (River)	SAL	203	1,376,884	1,376,884	15,700,844	15,700,844
Sligo	(Drumcliff)	119	Drumcliff (River)	SAL	205	226,737	195,882	1,146,017	1,146,017
Sligo	(Coastal)	x5	Carney (River)	SAL	206	46,726	46,726	0	0
Sligo	(Coastal)	x5	Grange (River)	SAL	207	141,987	141,987	0	0
Sligo (ST only)						**61,529**	**61,529**	**42,756**	**42,756**
Sligo	(Stream)	118	Willsborough (Stream)	ST	204	61,529	61,529	42,756	42,756

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Sligo Fisheries District

Table 23. Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Ballyshannon Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fishery Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Ballyshannon (SAL)						**10,178,849**	**3,361,359**	**92,513,368**	**28,714,469**
Ballyshannon	(Glen)	52	Glen (River)	SAL	219	359,004	356,998	629,681	66,729
Ballyshannon	(Glen)	52	Owenwee (River)	SAL	220	69,079	69,079	453,143	453,143
Ballyshannon	(Bungosteen)	54	Bungosteen (River)	SAL	217	175,143	154,911	239,144	3,187
Ballyshannon	(Oily)	55	Oily (River)	SAL	216	210,618	210,618	376,826	376,826
Ballyshannon	(Eany Water)	57	Eany (Water)	SAL	215	656,530	656,530	102,600	102,600
Ballyshannon	(Eask)	58	Eske (River)	SAL	214	496,658	431,848	4,263,573	3,964,506
Ballyshannon	(Stream)	59	Laghy (Stream)	SAL	213	181,228	181,228	147,627	147,627
Ballyshannon	(Ballintra)	60	Ballintra (River)	SAL	212	392,356	158,131	2,301,371	158,660
Ballyshannon	(Duff)	120	Duff (River)	SAL	208	4,61,575	461,575	2,446	2,446
Ballyshannon	(Drowes)	121	Drowes (River)	SAL	209	6,11,703	562,314	22,242,496	22,242,496
Ballyshannon	(Erne)	123	Abbey (River)	SAL	211	1,07,691	107,691	1,196,249	1,196,249
Ballyshannon	(Erne)	122	Erne (River)	SAL	210	6,457,264	10,436	60,558,212	0
Ballyshannon		*122*	*Erne (River)(nss)*			*6,457,264*			
Ballyshannon (ST only)						**145,033**	**145,033**	**0**	**0**
Ballyshannon	(Glenaddragh)	53	Glenaddragh (River)	ST	218	145,033	145,033	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Ballyshannon Fisheries District

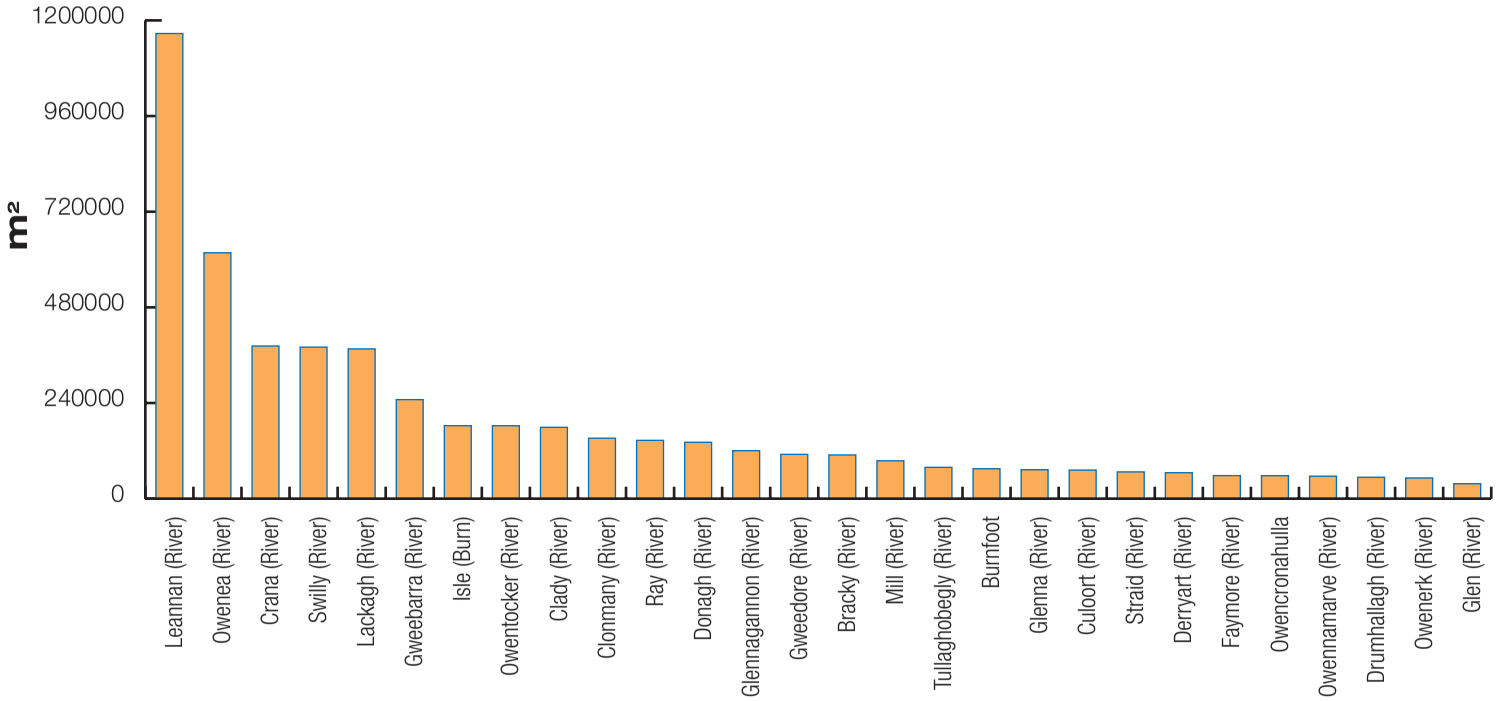
Table 24 Listing of salmon (and sea trout) fluvial and lacustrine habitat quantity (m^2) in the Letterkenny Fisheries District

DISTRICT	CATCHMENT	OS Cat No.	OS River Name	Fishery Type	Fisheries Board Code No.	Fluvial habitat total (m^2)	Fluvial habitat accessible (m^2)	Lacustrine habitat total (m^2)	Lacustrine habitat accessible (m^2)
Letterkenny (SAL)						**5,631,468**	**5,337,762**	**20,450,397**	**19,392,136**
Letterkenny	(Owencronahulla)	19	Owencronahulla	SAL	230	57,607	57,607	16,065	16,065
Letterkenny	(Carrownamaddy)	2	Derryart (River)	SAL	237	65,102	65,102	0	0
Letterkenny	(Glenna)	21	Glenna (River)	SAL	234	72,633	72,633	36,282	36,282
Letterkenny	(Gweedore)	22	Gweedore (River)	SAL	228	118,319	111,149	1,500,716	1,500,716
Letterkenny	(Clady)	23	Clady (River)	SAL	229	195,006	179,023	3,665,464	3,352,520
Letterkenny	(Tullaghobegly)	24	Tullaghobegly (River)	SAL	235	78,626	78,626	1,331,457	1,331,457
Letterkenny	(Faymore)	25	Faymore (River)	SAL	238	57,865	57,865	0	0
Letterkenny	(Lackagh)	27	Lackagh (River)	SAL	240	436,109	375,778	4,454,288	4,301,184
Letterkenny	(Ray)	3	Ray (River)	SAL	236	168,605	146,332	208,298	208,298
Letterkenny	(Leannan)	31	Leannan (River)	SAL	248	1,167,125	1,167,125	4,826,205	4,826,205
Letterkenny	(Drumhallagh)	32	Drumhallagh (River)	SAL	246	53,740	53,740	0	0
Letterkenny	(Mill)	34	Mill (River)	SAL	252	123,296	95,019	0	0
Letterkenny	(Clonmany)	4	Clonmany (River)	SAL	256	151,703	151,703	0	0
Letterkenny	(Owenamarve)	47	Owennamarve (River)	SAL	226	56,359	56,359	1,257,850	1,257,850
Letterkenny	(Gweebarra)	48	Gweebarra (River)	SAL	225	287,952	248,480	758,254	650,429
Letterkenny	(Straid)	5	Straid (River)	SAL	257	78,092	67,152	0	0
Letterkenny	(Owenea)	50	Owenea (River)	SAL	223	630,856	616,966	1,661,413	1,267,137
Letterkenny	(Swilly)	51	Isle (Burn)	SAL	250	183,078	183,078	0	0
Letterkenny	(Swilly)	51	Swilly (River)	SAL	249	394,241	380,213	237,707	237,707
Letterkenny	(Owentocker)	56	Owentocker (River)	SAL	222	204,263	182,949	154,005	63,893
Letterkenny	(Donagh)	6	Donagh (River)	SAL	258	141,449	141,449	0	0
Letterkenny	(Loughinn)	7	Glennagannon (River)	SAL	259	126,111	120,435	181,149	181,149
Letterkenny	(Owenerk)	8	Owenerk (River)	SAL	255	51,945	51,945	0	0
Letterkenny	(Crana)	9	Crana (River)	SAL	253	433,536	383,036	161,244	161,244
Letterkenny	(Coastal)	d_39	Burnfoot	SAL	251	75,179	75,179	0	0
Letterkenny	(Coastal)	h6_38	Bracky (River)	SAL	221	109,650	109,650	0	0
Letterkenny	(Coastal)	a nth	Culoort (River)	SAL	261	71,714	71,714	0	0
Letterkenny	(Coastal)	n6	Glen (River)	SAL	231	41,307	37,455	0	0
Letterkenny (ST only)						**407,630**	**407,630**	**4,162,234**	**4,162,234**
Letterkenny	(Glenvar)	10	Glenvar (River)	ST	245	28,188	28,188	0	0
Letterkenny	(Owenawillin)	20	Owenawillin	ST	232	16,986	16,986	329,873	329,873
Letterkenny	(Duntally)	26	Duntally (River)	ST	239	26,244	26,244	57,889	57,889

Letterkenny	(Big Burn)	28	Big (Burn)	ST	241	34,725	34,725	54,479	54,479
Letterkenny	(Bunlin)	29	Bunlin (River)	ST	242	24,842	24,842	0	0
Letterkenny	(Loughkeel)	30	Loughkeel (Burn)	ST	243	19,858	19,858	609,934	609,934
Letterkenny	(Glenalla)	33	Glenalla (River)	ST	247	65,693	65,693	73,477	73,477
Letterkenny	(Abberachrin)	49	Duvoge (River)	ST	224	49,970	49,970	1,161,552	1,161,552
Letterkenny	(Coastal)	a7	Aghaweel (River)	ST	254	16,786	16,786	0	0
Letterkenny	(Coastal)	l6	Dunglow (River)	ST	227	57,569	57,569	1,875,030	1,875,030
Letterkenny	(Coastal)	u6_38	Burnside (River)	ST	244	33,671	33,671	0	0
Letterkenny	(Coastal)	a	Ballyboe (River)	ST	260	16,769	16,769	0	0
Letterkenny	(Coastal)	n6	Owentully	ST	233	16,329	16,329	0	0

Notes: Fluvial habitat refers to the wetted area (m^2) of riverine habitat within a given river system except 1st order streams
Fluvial accessible refers to the extent of channel into which salmonids can migrate freely up to the first impassable barrier
Lacustrine refers to lakes or standing water bodies

Fluvial habitat accessible to salmon in the Letterkenny Fisheries District



4. Discussion

This report provides, for the first time, a comprehensive quantification of the freshwater salmon habitat resource in Ireland. The information indicates that salmon have access to and utilise the majority of the country's rivers and lakes. The data generated is already being successfully used by the Standing Scientific Committee of the National Salmon Commission to provide precautionary catch advice to managers. The committee combines the outputs of the analysis carried out in the project with the outputs of the Bayesian Hierarchical Stock and Recruitment Analysis (BHSRA) developed by Prevost et al., (in press) as a way of determining salmon conservation limits or escapement goals for Irish rivers (Prevost et al., 2003). The BHSRA is a new statistical approach to setting and transporting biological reference points such as CLs to salmon rivers with little or no stock dynamic information. In Prevost et al., (2003) data from 13 stock and recruitment sets from monitored rivers in the North East Atlantic have been integrated to construct a model that can be used to transport stock and recruitment properties from data rich to data poor river systems. To facilitate this transportation exercise two pieces of information are required namely the latitude of the river (in this instance the mid point of river catchment) and the river systems accessible wetted area in m^2. The outputs of the wetted area study, combined with the BHSRA analysis, are being used in conjunction with the previous catch based model to provide high quality catch advice for the National Salmon Commission.

The determination of conservation limits using the approach described above uses basic outputs from the project namely, latitude values, estimates of the sizes of the rivers and lakes and an assessment of the amount of that habitat available to salmon. While the ability to satisfy these basic requirements is new and significant, the higher resolution data generated in the project particularly the ability to describe the quality of the habitat resolves an important methodological deficit. This new approach offers an opportunity to provide the scientifically based information necessary for effective fisheries management that has heretofore not been available to managers. In this regard the outputs of the project provide the fisheries scientist or the fisheries manager with the realistic opportunity to predict juvenile salmon production based on examining and understanding the relationship between fish production and habitat quality. Consequently, to undertake accurate stream production estimates knowledge of the key drivers of that production is required. These drivers can be listed as stream gradient, water chemistry, water quality and habitat quality. This project delivers two of these key production parameters namely stream gradient and water quality status. It must be remembered here that gradient is a surrogate of biologically more meaningful hydromorphological entities such as stream riffles, glides and pools (Amiro, 1991). McGinnity *et al.*, (1999), as a prototype for this project, successfully used the desk based approach to estimate the potential of rivers in County Mayo to produce salmon smolts.

The significance of having an ability to estimate freshwater production is that it goes some way, in combination with knowledge of marine survival, to provide fisheries managers with an estimate of fishery abundance prior to its exploitation. This is in contrast to the retrospective models that are currently used.

In addition to its value for fisheries management, the information and novel use of GIS based quantitative techniques presented in this report are considered to have fundamental value for effective implementation of Water Framework Directive River Basin Management projects currently being established.

Further improvement of the project will require an assessment and mapping of the status of the physical habitat quality of Irish rivers. Physical habitat is impacted by a range of anthropogenic activities in salmon producing rivers such as forestry, agriculture and urban development. These activities have a negative impact on the potential of the habitat to sustain salmon. While no physical habitat quality data exists presently, the EU Water Framework Directive requires that surveillance monitoring of the morphological condition of Irish rivers be undertaken. When this data becomes available it should be integrated in this project improving our ability to predict juvenile fish production. Similarly, information on water chemistry, specifically stream alkalinity data, linked to this project would also improve predictive capacity.

The estimates of wetted area produced in this project are derived from a model developed in a previous project (McGinnity *et al.*, 1999) and are based solely on the measurement of river sites in County Mayo. While these estimates are considered robust, it is recommended that regional models be developed that account for topographical, geological and meteorological variation in the Irish landscape. The project also provides estimates of lake surface area. In order to determine the potential of these lakes to produce juvenile salmon additional bathymetric information is required as it is known (Pepper *et al.,* 1985, Matthews *et al.*, 1997) that juvenile salmon production in lakes is primarily confined to the littoral euphotic zone generally defined by those areas of the lake that have a depth of two metres or less.

The project identified a significant amount of the freshwater habitat as not being capable of sustaining natural salmon populations because of presence of large hydropower stations. To bring this significant resource into production, fish passage difficulties, particularly relating to smolt migration, need to be resolved. The project also identified that rivers in the east, southeast and south are impacted by poor water quality. This is not unexpected given the concentration of urban development on the east coast and that of intensive agricultural activity in the south of the country. The implementation of the EU Water Framework Directive and changes to the EU Common Agriculture Policy provide some promise of improving water quality conditions in the future. It is likely, however, that demographic trends will continue on their current trajectory and thus it will be increasingly difficult to allocate scarce water resources between freshwater fisheries and the utilities required to sustain industrial and population development. However, this should not be a reason to allow any further deterioration in the freshwater fisheries source and appropriate safeguards must be put in place.

In the past because of issues of scale i.e 75,000 kilometers of rivers and streams and 5,000 lakes, technological limitations and the financial costs associated with undertaking high resolution habitat surveys such a project as has been described here was not possible. It is only with the development of information technology, geographical information systems and remote sensing that the quantification of the freshwater fisheries resource could be provided on a national scale. The integration of water quality and physical data describing the freshwater resource undertaken in this project has been innovative and provides the basis for the rational management of Irelands salmon resource. The continuing development of new technology will provide opportunities to improve the scientific basis of fisheries management.

5. References

Amiro, P.G. (1993). Habitat measurement and population estimation of juvenile Atlantic salmon. In R.J. Gibson and R.E. Cutting [ed.]. Production of juvenile Atlantic salmon in natural waters. Can. Spec. Publ. Fish. Aquat. Sci. 118. P 81-97.

Anon, (2001). Erne Salmon Management Programme, Eds: R.Mathers & K.Crowley. Northern Regional Fisheries Board.

Crozier. W.W., Potter, E.C.E., Prévost, E., Schön, P-J. and O'Maoiléidigh, N. 2004. A coordinated approach towards the development of a scientific basis for management of wild Atlantic salmon in the North-East Atlantic (SALMODEL). Queen's University of Belfast, Belfast. 431pp.

Matthews, M.A., Poole, W.R., Dillane, M.G and Whelan, K.F., (1997). Juvenile recruitment and smolt output of brown trout and Atlantic salmon from a lacustrine system in western Ireland. Fish. Res., 31: 19-37.

McGinnity, P., Mills, P., Fitzmaurice, P, O'Maolieidigh N., Kelly, A. (1999). A GIS supported estimate of Atlantic salmon smolt production for the river catchments of Northwest Mayo. A report for the Marine Institute funded under the Marine Research Measure 97.IR.MR.015. pp 45.

O'Farrell, M., Wilkins, N.P., Murphy, M., O'Connor, W., O'Sullivan, L., Quigley, D., Browne, J., O'Maoileidigh, N., Cross,T., Galvin, P., & Ferguson, A. (1997). Overview of Salmon Management Programmes on Irish Rivers Fuelling Hydro-Electric Generating Stations. Proceedings of the FISSTA Conference on Wild Salmon Management, Skibbereen, Co. Cork, Sept, 1996.

Pepper, V.A., Oliver, N.P. and Blundon, R. (1985). Juvenile anadromous Atlantic salmon of three lakes of Newfoundland. Int. Revue ges. Hydrobiol. 70: 733-753.

Potter, E.C.E., Hansen, L.P., Gudbergsson, G., Crozier, W.W., Erkinaro, J., Insulander, C., MacLean, J., O'Maoileidigh, N.S. and Prusov, S. 1998. A method for estimating preliminary conservation limits for salmon stocks in the NASCO-NEAC area. International Council for the Exploration of the Sea CM 1998/T: 17.

Prévost, E., Ó'Maoiléidigh, N., McGinnity, P., Gargan, P., Crozier, W. and Roche, W. (2003). Setting and Transporting Biological Reference Points to Rivers in Ireland using a Bayesian Hierarchical Stock and Recruitment Analysis. ICES CM 2003/V14Theme session V. Mixed and Multi-Stock Fisheries Challenges and Tools for Assessments, Prediction and Management.

Prévost E., Parent E., Crozier W., Davidson I., Dumas J., Gudbergsson G., Hindar K., McGinnity P., MacLean J., Saettem L.M., (in press). Setting biological reference points for Atlantic salmon stocks: transfer of information from data-rich to sparse-data situations by Bayesian hierarchical modeling. ICES J. Mar. Sci.

Rosgen, D.L. (1994). A classification of natural rivers. Catena, Vol.22: 169-199.

SALMODEL url: www.salmodel.net/

Strahler, A.N. (1952). Hyposmetric (area-altitude) analysis of erosional topography. Bull. Geol. Soc. Am., 63: 1117-42.

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Appendices 1-34

Detailed Fisheries District Data

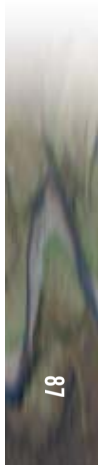
Appendix 1. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Dundalk Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Dundalk (all systems)									**5,064,685**	**2,759,610**					**6,580,986**	**5,811,299**
Dundalk	Blackwater	68	395,051,410		03				2,241,486	0					769,687	0
Dundalk	Piedmont	90	27,957,433		06				97,569	97,569					23,896	23,896
Dundalk	Ballymascanlan	91	40,535,826		06				63,085	63,085					0	0
Dundalk	Castletown	92	68,974,160		06				109,437	109,437					0	0
Dundalk	Stream	93	8,852,588		06				18,141	18,141					0	0
Dundalk	Fane	94	303,403,787		06				396,721	396,721					4,214,139	4,214,139
Dundalk	Glyde	95	339,143,626		06				923,075	923,075					1,142,900	1,142,900
Dundalk	Dee	96	396,045,097		06				1,128,973	1,065,384					430,364	430,364
Dundalk	Coastal	j1	17,269,971		06				13,814	13,814					0	0
Dundalk	Coastal	k1	2,999,457		06				0	0					0	0
Dundalk	Coastal	l1	18,430,341		06				23,435	23,435					0	0
Dundalk	Coastal	m1	6,664,936		06				2,248	2,248					0	0
Dundalk	Coastal	n1	58,397,907		06				46,701	46,701					0	0
Dundalk (SAL)									**2,436,340**	**2,372,751**					**1,591,368**	**1,591,368**
Dundalk	(Ballymascanlan)	91		Flurry (River)	06	06F02	SAL	2	53,530	53,530	69.0	69.0	69.0	69.0	0	0
Dundalk	(Castletown)	92		Castletown (River)	06	06C01	SAL	3	82,514	82,514	0.0	0.0	0.0	0.0	0	0
Dundalk	(Fane)	94		Fane (River)	06	06F01	SAL	4	238,298	238,298	5.8	5.8	5.8	5.8	18,104	18,104
Dundalk	(Glyde)	95		Glyde (River)	06	06G02	SAL	5	933,025	933,025	2.1	13.5	2.1	13.5	1,142,900	1,142,900
Dundalk	(Dee)	96		Dee (River)	06	06D01	SAL	6	1,128,973	1,065,384	0.0	43.3	0.0	41.5	430,364	430,364
Dundalk (ST only)									**97,569**	**97,569**					**23,896**	**23,896**
Dundalk	(Piedmont)	90		Castletown (River)	06	06B01	ST	1	97,569	97,569	0	0	0	0	23,896	23,896

DISTRICT = Fisheries District
CATCHMENT = OS catchment name
OS CAT NO = OS river catchment number
CAT AREA = Catchment area (m^2)
Fishery System = OS River Name (or local name where OS name absent) of fishery
EPA HA = EPA Hydrometric area
EPA RVC = EPA River Code
FB Type = Fisheries Board System Classification
FB Code = Fisheries Board River Code
FLUV TOT = Total Fluvial Habitat (m^2)
FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 2. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Dundalk Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Dundalk (SAL)																		
Dundalk	(Ballymascanlan)	91	Flurry (River)	42,191	2,405	616	850	960	405	342	234	256	127	5,144	3,257	2,270	1,942	46,061
Dundalk	(Castletown)	92	Castletown (River)	46,903	17,573	2,809	2,718	3,380	406	1,730	1,168	939	947	3,942	354	5,473	6,683	70,003
Dundalk	(Fane)	94	Fane (River)	200,657	14,996	2,611	3,843	3,065	1,270	2,366	1,645	672	1,334	5,838	1,167	6,677	8,347	222,107
Dundalk	(Glyde)	95	Glyde (River)	783,581	41,306	23,200	17,407	18,369	10,161	6,962	5,318	3,548	2,637	20,538	5,144	21,579	41,534	864,767
Dundalk	(Dee)	96	Dee (River)	915,416	53,576	23,974	14,385	13,131	4,862	10,708	3,801	3,690	2,502	19,339	4,983	20,548	33,762	1,006,091
Dundalk (ST only)																		
Dundalk	(Piedmont)	90	Castletown (River)	35,563	522	8,204	16,931	3,315	2,094	3,945	5,287	2,537	1,671	17,499	4,935	16,772	16,481	59,381



Appendix 3. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Drogheda Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Drogheda (all systems)									**7,558,802**	**7,558,802**					**13,383,181**	**13,383,181**
Drogheda	Boyne	159	2,679,430,150		07				6,762,914	6,762,914					13,293,621	13,293,621
Drogheda	Nanny	160	239,089,778		08				537,438	537,438					1,207	1,207
Drogheda	Stream	161	14,681,384		08				20,793	20,793					0	0
Drogheda	Delvin	162	81,202,945		08				155,901	155,901					0	0
Drogheda	Stream	97	29,975,861		06				23,019	23,019					0	0
Drogheda	Coastal	o1	2,149,870		06				0	0					0	0
Drogheda	Coastal	p1	13,650,919		08				2,699	2,699					0	0
Drogheda	Coastal	q1	3,581,972		08				0	0					0	0
Drogheda	Coastal	r1	35,473,610		08				56,038	56,038					88,353	88,353
Drogheda	Coastal	n1	3,821,736		06				0	0					0	0
Drogheda (SAL)									**6,695,412**	**6,695,412**					**13,221,896**	**13,221,896**
Drogheda	(Boyne)	159		Boyne (River)	07	07B04	SAL	8	6,695,412	6,695,412	12.4	46.9	12.4	46.9	13,221,896	13,221,896
Drogheda (ST only)									**705,707**	**705,707**					**1,207**	**1,207**
Drogheda	(Nanny)	160		Nanny (River)	08	08N01	ST	9	526,787	526,787	21.6	60.3	21.6	60.3	1,207	1,207
Drogheda	(Delvin)	162		Delvin (River)	08	08D01	ST	10	155,901	155,901	13.8	21.7	13.8	21.7	0	0
Drogheda	(Stream)	97		Termonfeckin	06	06T01	ST	7	23,019	23,019	26.2	89.0	26.2	89.0	0	0

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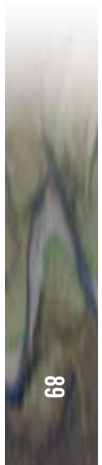
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 4. Fluvial salmon (and sea trout) accessible weeted area (m^2) habitat quality rating data for the Drogheda Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Drogheda (SAL)																		
Drogheda	(Boyne)	159	Boyne (River)	5,724,452	398,439	191,082	115,004	83,133	48,437	33,318	23,870	12,898	11,281	53,499	11,751	65,928	191,731	6,426,003
Drogheda (ST only)																		
Drogheda	(Nanny)	160	Nanny (River)	420,016	50,829	13,496	11,821	8,210	5,042	4,042	3,530	2,181	1,427	6,192	1,740	8,061	20,825	496,161
Drogheda	(Delvin)	162	Delvin (River)	109,449	16,459	7,117	3,678	4,672	3,839	3,841	1,462	1,290	352	3,741	610	4,773	13,815	136,703
Drogheda	(Stream)	97	Termonfeckin	17,523	2,362	578	313	813	39	444	214	47	291	396	177	557	1,511	20,774



Appendix 5. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Dublin Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Dublin (all systems)									**6,008,893**	**3,754,825**					**23,423,894**	**786,273**
Dublin	Stream	163	84,548,202		08				208,954	208,954					0	0
Dublin	Broad Meadow Water	164	166,250,221		08				535,944	221,844					0	0
Dublin	Mayne	165	18,186,463		09				18,903	18,903					0	0
Dublin	Santry	166	26,722,120		09				24,028	24,028					0	0
Dublin	Tolka	167	148,646,799		09				409,580	50,959					0	0
Dublin	Liffey	168	1,349,377,590		09				3,991,161	2,519,458					20,594,272	775,820
Dublin	Dargle	169	123,524,935		10				344,425	331,623					2,877	2,877
Dublin	Vartry	170	156,511,443		10				246,759	170,199					2,819,169	0
Dublin	Coastal	s1	30,300,147		08				31,777	31,777					0	0
Dublin	Coastal	t1	35,369,856		09				19,012	19,012					0	0
Dublin	Coastal	u1	16,701,121		09				385	385					0	0
Dublin	Coastal	v1	22,136,048		09				0	0					0	0
Dublin	Coastal	x1_09	18,964,878		09				0	0					0	0
Dublin	Coastal	x1_10	58,126,616		10				54,352	54,352					7,576	7,576
Dublin	Coastal	y1	89,395,035		10				83,487	63,205					0	0
Dublin	Coastal	r1	44,727,261		08				40,126	40,126					0	0
Dublin	Coastal	z1	1,773,719		10				0	0					0	0
Dublin (SAL)									**3,967,758**	**2,741,828**					**23,031,955**	**667,656**
Dublin	(Liffey)	168		Liffey (River)	09	09L01	SAL	15	3,444,930	2,308,361	10.2	15.4	12.2	18.2	20,209,909	664,779
Dublin		168		Liffey (River) (nss)					830,129						19,545,130	
Dublin	(Dargle)	169		Dargle (River)	10	10D01	SAL	18	344,425	331,623	14.5	14.5	15.0	15.0	2,877	2,877
Dublin	(Vartry)	170		Vartry (River)	10	10V01	SAL	21	178,403	101,844	0.0	12.8	0.0	22.5	2,819,169	0
																0
Dublin (ST only)									**1,675,533**	**647,394**					**280,898**	**7,576**
Dublin	(Stream)	163		Ballough (Stream)	08	08B03	ST	11	95,015	95,015	0.2	51.5	0.2	51.5	0	0
Dublin	(Stream)	163		Ballyboghil	08	08B01	ST	12	109,677	109,677	39.0	57.5	39.0	57.5	0	0
Dublin	(Broad Meadow Water)	164		Broad Meadow (River)	08	08B02	ST	13	535,944	221,844	53.5	53.5	54.2	54.2	0	0
Dublin	(Tolka)	167		Tolka (River)	09	09T01	ST	14	409,580	50,959	38.1	51.8	93.5	93.5	0	0
Dublin	(Liffey)	168		Dodder (River)	09	09D01	ST	16	373,773	38,638	25.5	39.0	0.0	0.0	273,322	0
Dublin	(Vartry)	170		Rathnew (River)	10		ST	22	41,526	41,526					0	0
Dublin	(Coastal)	x1_10		Shanganagh	10	10S01	ST	17	54,352	54,352	33.2	46.0	33.2	46.0	7,576	7,576
Dublin	(Coastal)	y1		Newtownmountkennedy	10	10N02	ST	19	27,586	7,303	36.0	36.0	0.0	0.0	0	0
Dublin	(Coastal)	y1		Newcastle [Wicklow]	10	10N01	ST	20	28,080	28,080	0.0	45.6	0.0	45.6	0	0

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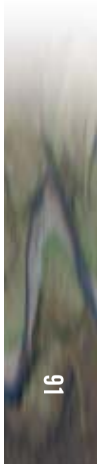
FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 6. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Dublin Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Dublin (SAL)																		
Dublin	(Liffey)	168	Liffey (River)	,889,331	127,982	85,117	46,295	40,542	18,644	23,056	19,964	9,156	6,521	41,754	7,277	50,205	102,154	2,148,724
Dublin		168	Liffey (River) (nss)															
Dublin	(Dargle)	169	Dargle (River)	108,970	34,374	21,754	35,712	22,728	9,697	14,964	10,484	13,390	4,671	54,881	18,882	54,060	57,872	200,809
Dublin	(Vartry)	170	Vartry (River)	60,004	4,937	1,823	1,710	12,369	3,032	3,274	4,277	1,001	1,406	8,010	1,054	9,453	22,862	68,475
Dublin (ST only)																		
Dublin	(Stream)	163	Ballough (Stream)	37,815	26,180	15,027	5,198	2,388	2,898	1,700	1,199	508	619	1,483	308	2,302	8,185	84,220
Dublin	(Stream)	163	Ballyboghil	51,162	31,602	11,077	5,741	3,821	2,427	1,617	1,005	372	217	637	14	1,212	8,870	99,582
Dublin	(Broad Meadow Water)	164	Broad Meadow (River)	143,451	46,605	6,931	4,922	4,129	2,416	3,433	1,181	978	2,160	5,638	1,072	7,704	11,159	201,908
Dublin	(Tolka)	167	Tolka (River)	39,368	6,456	1,461	2,173	584	0	0	0	425	0	491	0	916	584	49,459
Dublin	(Liffey)	168	Dodder (River)	33,670	3,015	1,053	135	0	0	0	0	120	0	646	261	504	0	37,873
Dublin	(Vartry)	170	Rathnew (River)	24,088	6,079	2,830	2,612	2,102	1,547	265	576	480	437	510	0	1,427	4,490	35,610
Dublin	(Coastal)	x1_10	Shanganagh	29,270	6,808	2,912	2,410	2,983	1,898	1,107	1,574	705	1,350	3,335	1,060	4,330	7,562	41,400
Dublin	(Coastal)	y1	Newtownmountkennedy	1,817	37	2,898	850	1,289	91	183	138	0	0	0	0	0	1,701	5,602
Dublin	(Coastal)	y1	Newcastle [Wicklow]	17,749	3,388	1,122	1,630	939	305	225	449	171	584	1,519	188	2,086	1,918	23,889



Appendix 7. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Wexford Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Wexford (Total)									**8,968,691**	**8,650,003**					**8,202,023**	**6,673,298**
Wexford	Ovoca	171	649,486,717		10				1,769,810	1,641,221					1,960,344	431,619
Wexford	Three Mile Water	172	29,635,411		10				46,506	46,506					0	0
Wexford	Potters	173	44,480,737		10				102,307	102,307					0	0
Wexford	Redcross	174	36,266,701		10				87,792	87,792					0	0
Wexford	Slaney	175	1,746,734,486		12				5,144,959	5,144,959					13,366	13,366
Wexford	Clonough	176	72,554,124		11				189,999	189,999					5,481	5,481
Wexford	Owenavorragh	177	165,435,359		11				456,966	456,966					0	0
Wexford	Sow	178	89,855,272		12				190,384	285					0	0
Wexford	Stream	179	154,359,351		13				386,632	386,632					0	0
Wexford	Coastal	a2	1,333,788		10				0	0					0	0
Wexford	Coastal	b2	11,294,776		10				21,436	21,436					0	0
Wexford	Coastal	c2	18,297,053		10				28,040	28,040					0	0
Wexford	Coastal	d2	18,684,360		10				23,495	23,495					0	0
Wexford	Coastal	e2	15,112,937		11				7,738	7,738					0	0
Wexford	Coastal	f2_11	140,966,297		11				198,515	198,515					0	0
Wexford	Coastal	f2_12	26,043,922		12				34,050	34,050					0	0
Wexford	Coastal	h2_12	116,517,932		12				243,250	243,250					18,138	18,138
Wexford	Coastal	h2_13	68,885,825		13				36,812	36,812					6,204,694	6,204,694
Wexford	Coastal	z1	8,869,429		10				0	0					0	0
Wexford (SAL)									**7,161,341**	**7,032,752**					**1,973,710**	**444,985**
Wexford	(Ovoca)	171		Avoca (River)	10	10A03	SAL	26	1,766,724	1,638,135	13.3	18.5	14.4	19.9	1,960,344	431,619
Wexford	(Slaney)	175		Slaney (River)	12	12S02	SAL	31	4,945,255	4,945,255	1.9	20.4	1.9	20.4	13,366	13,366
Wexford	(Owenavorragh)	177		Owenavorragh (River)	11	11O01	SAL	28	449,362	449,362	22.7	46.9	22.7	46.9	0	0
Wexford (ST only)									**794,467**	**604,368**					**0**	**0**
Wexford	(Three Mile Water)	172		Three Mile Water	10	10T01	ST	23	46,506	46,506	5.1	27.8	5.1	27.8	0	0
Wexford	(Potters)	173		Potter's (River)	10	10P01	ST	24	102,307	102,307	0.0	0.0	0.0	0.0	0	0
Wexford	(Redcross)	174		Redcross (River)	10	10R01	ST	25	87,792	87,792	0.0	0.0	0.0	0.0	0	0
Wexford	(Clonough)	176		Inch (River)	11	11I01	ST	27	181,045	181,045	24.0	34.1	24.0	34.1	0	0
Wexford	(Sow)	178		Sow (River)	12	12S03	ST	30	190,384	285	n/d	n/d	n/d	n/d	0	0
Wexford	(Stream)	179		Duncormick	13	13D01	ST	32	106,546	106,546	n/d	n/d	n/d	n/d	0	0
Wexford	(Coastal)	f2_11		Blackwater (River)	11	11B03	ST	29	79,887	79,887	n/d	n/d	n/d	n/d	0	0

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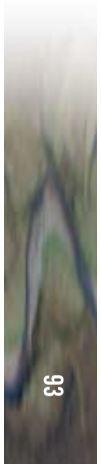
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 8. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Wexford Fisheries District clasified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Wexford (SAL)																		
Wexford	(Ovoca)	171	Avoca (River)	868,777	241,639	67,356	56,911	65,324	51,552	31,743	39,507	22,566	18,422	174,339	58,291	157,860	191,997	1,229,987
Wexford	(Slaney)	175	Slaney (River)	3,568,462	409,481	244,639	141,401	125,290	87,590	59,444	60,958	40,000	32,548	175,441	39,058	209,700	336,027	4,360,470
Wexford	(Owenavorragh)	177	Owenavorragh (River)	339,206	38,307	23,918	13,629	8,910	6,666	3,291	3,814	1,998	3,018	6,605	1,214	10,407	22,680	415,060
Wexford (ST only)																		
Wexford	(Three Mile Water)	172	Three Mile Water	23,482	7,089	3,536	4,712	3,670	665	868	746	504	327	906	361	1,376	5,949	38,820
Wexford	(Potters)	173	Potter's (River)	80,144	8,785	2,523	1,682	2,047	1,394	997	723	255	1,138	2,620	631	3,382	5,160	93,134
Wexford	(Redcross)	174	Redcross (River)	66,408	5,343	1,323	4,045	2,225	1,415	1,111	643	792	1,178	3,309	1,108	4,172	5,394	77,119
Wexford	(Clonough)	176	Inch (River)	107,007	19,410	11,127	6,763	8,934	5,884	1,988	4,192	2,819	1,478	11,442	2,033	13,706	20,999	144,307
Wexford	(Sow)	178	Sow (River)	285														285
Wexford	(Stream)	179	Duncormick	80,541	14,273	3,945	3,132	1,332	1,283	557	375	143	40	927	452	658	3,546	101,891
Wexford	(Coastal)	f2_11	Blackwater (River)	35,125	24,323	5,410	4,171	3,865	1,636	1,029	910	1,017	309	2093	321	3,099	7,440	69,027



Appendix 9. Fluvial salmon (and sea trout) wetted area habitat quantity (m^2) data for the Waterford Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Waterford (Total)									**25,633,775**	**25,303,964**					**1,038,257**	**754,821**
Waterford	Corock	180	155,943,823		13				450,615	450,615					0	0
Waterford	Owenduff	181	106,089,447		13				128,171	128,171					0	0
Waterford	Suir	182	3,546,629,242		16				10,410,163	10,138,665					871,705	588,269
Waterford	Barrow	183	3,010,730,434		14				6,680,367	6,627,474					20,384	20,384
Waterford	Nore	184	2,598,018,199		15				6,816,091	6,816,091					89,876	89,876
Waterford	Mahon	185	99,075,283		17				287,493	282,073					0	0
Waterford	Tay	186	68,391,230		17				179,556	179,556					0	0
Waterford	Dalligan	187	19,777,874		17				42,019	42,019					0	0
Waterford	Colligan	188	92,818,626		17				217,306	217,306					0	0
Waterford	Brickey	189	40,298,871		17				41,751	41,751					0	0
Waterford	Coastal	i2	24,822,833		13				15,748	15,748					0	0
Waterford	Coastal	k2	175,084,906		17				200,752	200,752					46,796	46,796
Waterford	Coastal	l2	15,436,966		17				23,994	23,994					0	0
Waterford	Coastal	m2	2,852,019		17				0	0					0	0
Waterford	Coastal	n2	36,509,226		17				32,174	32,174					5,360	5,360
Waterford	Coastal	o2	9,062,830		17				0	0					0	0
Waterford	Coastal	p2	12,592,773		17				0	0					0	0
Waterford	Coastal	j2	143,949,481		13				107,575	107,575					4,136	4,136
Waterford (SAL)									**24,569,103**	**24,345,915**					**350,587**	**350,587**
Waterford	(Corock)	180		Corock (River)	13	13C01	SAL	33	450,615	450,615	0.0	0.0	0.0	0.0	0	0
Waterford	(Owenduff)	181		Owenduff (River)	13	13O01	SAL	34	128,171	128,171	0.0	6.3	0.0	6.3	0	0
Waterford	(Suir)	182		Suir (River)	16	16S02	SAL	43	8,911,096	8,795,447	3.4	18.3	3.4	18.5	195,057	195,057
Waterford	(Suir)	182		Glen (River)	16		SAL	42	44,422	44,422					0	0
Waterford	(Suir)	182		Lingaun (River)	16	16L01	SAL	41	221,793	221,793	0.0	0.0	0.0	0.0	0	0
Waterford	(Suir)	182		Black Water	16	16B02	SAL	39	263,393	214,168	1.7	11.3	2.0	10.3	55,681	55,681
Waterford	(Suir)	182		Clodiagh (River)	16	16C03	SAL	44	417,450	417,450	2.7	9.1	2.7	9.1	0	0
Waterford	(Barrow)	183		Barrow (River)	14	14B01	SAL	37	6,548,527	6,495,633	11.3	32.5	11.4	32.8	12,473	12,473
Waterford	(Barrow)	183		Aughnavaud (River)	14	14A04	SAL	36	47,332	47,332	0.0	0.0	0.0	0.0	0	0
Waterford	(Barrow)	183		Pollmounty (River)	14	14P03	SAL	35	55,719	55,719	5.9	19.9	5.9	19.9	0	0
Waterford	(Nore)	184		Nore (River)	15	15N01	SAL	38	6,796,230	6,796,230	4.3	32.1	4.3	32.1	87,376	87,376

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Waterford	(Mahon)	185		Mahon (River)	17	17M01	SAL	50	287,493	282,073	0.0	8.0	0.0	8.1	0	0
Waterford	(Tay)	186		Tay (River)	17	17T01	SAL	51	179,556	179,556	0.0	16.2	0.0	16.2	0	0
Waterford	(Colligan)	188		Colligan (River)	17	17C01	SAL	53	217,306	217,306	0.0	0.0	0.0	0.0	0	0
Waterford (ST only)									**585,417**	**478,792**					**576,503**	**293,067**
Waterford	(Suir)	182		Pil (River)	16		ST	40	140,879	140,879					3,630	3,630
Waterford	(Suir)	182		Ballymoat (Stream)	16		ST	47	45,406	45,406					0	0
Waterford	(Suir)	182		Dawn (River)	16		ST	45	107,997	1,372					283,436	0
Waterford	(Suir)	182		John's River	16		ST	48	124,693	124,693					0	0
Waterford	(Suir)	182		Whelanbridge (River)	16		ST	46	53,290	53,290					289,437	289,437
Waterford	(Dalligan)	187		Dalligan (River)	17	17D01	ST	52	42,019	42,019	0.0	0.0	0.0	0.0	0	0
Waterford	(Brickey)	189		Brickey (River)	17	17B01	ST	54	38,998	38,998	21.4	97.6	21.4	97.6	0	0
Waterford	(Coastal)	k2		Annestown (Stream)	17	17D02	ST	49	32,135	32,135	0.0	59.2	0.0	59.2	0	0

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% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
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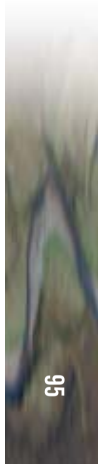

Appendix 10. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Waterford Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Waterford (SAL)																		
Waterford	(Corock)	180	Corock (River)	342,154	34,622	17,581	12,545	11,880	6,154	4,547	4,425	2,642	1,978	12,088	2,723	13,983	27,026	406,883
Waterford	(Owenduff)	181	Owenduff (River)	103,696	8,642	2,225	3,554	1,063	3,130	1,144	706	747	96	3,169	645	3,367	6,438	117,721
Waterford	(Suir)	182	Suir (River)	6,276,975	735,239	344,682	216,775	199,272	146,567	113,811	97,327	66,407	58,168	540,224	172,972	495,990	566,146	7,560,339
Waterford	(Suir)	182	Glen (River)	20,586	1,877	184	1,714	422	1,028	716	351	1,414	784	15,346	5,992	11,551	2,517	24,362
Waterford	(Suir)	182	Lingaun (River)	124,132	22,265	11,622	7,250	10,112	6,098	8,933	5,500	4,664	1,562	19,654	7,057	18,823	30,643	165,269
Waterford	(Suir)	182	Black Water	156,196	7,342	24,745	20,372	676	1,357	991	354	615	45	1,476	513	1,622	3,378	208,655
Waterford	(Suir)	182	Clodiagh (River)	148,832	52,103	43,178	33,680	24,826	17,234	19,771	5,753	4,162	1,802	66,109	33,134	38,939	71,597	273,779
Waterford	(Barrow)	183	Barrow (River)	5,363,005	379,563	195,720	176,993	91,097	55,742	52,511	40,609	20,900	16,974	102,519	21,515	119,366	244,006	6,110,747
Waterford	(Barrow)	183	Aughnavaud (River)	20,301	6,012	3,622	7,381	1,514	3,640	533	1,555	131	704	1,939	115	2,659	7,898	36,661
Waterford	(Barrow)	183	Pollmounty (River)	25,392	6,668	4,216	3,097	3,952	2,866	3,084	983	1,816	763	2,881	469	4,991	10,885	39,373
Waterford	(Nore)	184	Nore (River)	5,170,209	557,433	291,690	231,889	132,172	81,476	63,679	62,336	29,817	23,928	151,601	35,010	171,152	342,786	6,247,282
Waterford	(Mahon)	185	Mahon (River)	166,026	42,791	6,148	5,097	14,206	6,615	4,221	4,606	11,375	2,613	18,377	6,360	26,005	30,141	219,568
Waterford	(Tay)	186	Tay (River)	50,977	59,390	28,140	8,558	9,329	4,082	5,716	1,490	1,773	2,120	7,980	1,954	10,033	24,842	142,728
Waterford	(Colligan)	188	Colligan (River)	52,526	58,141	29,263	9,876	9,958	17,343	6,002	5,888	1,169	4,295	22,847	4,686	23,624	39,284	149,711
Waterford (ST only)																		
Waterford	(Suir)	182	Pil (River)	123,146	1,805	2,651	2,786	4,305	5,310	875	0	0	0	0	0	0	10490	130,388
Waterford	(Suir)	182	Ballymoat (Stream)	28,820	5,947	2,114	4,156	907	1,373	511	181	130	91	1,176	133	1,265	2,972	41,037
Waterford	(Suir)	182	Dawn (River)	1,372														1,372
Waterford	(Suir)	182	John's River	73,781	22,963	16,250	3,305	3,374	4,891	0	0	77	0	53	18	112	8,265	116,298
Waterford	(Suir)	182	Whelanbridge (River)	37,283	8,804	1,396	221	443	346	385	261	125	74	3,952	786	3,365	1,436	47,703
Waterford	(Dalligan)	187	Dalligan (River)	16,033	2,126	3,758	1,629	1,228	4,295	599	4,872	1,350	662	5,467	2781	4,698	10,994	23,546
Waterford	(Brickey)	189	Brickey (River)	35,571	249	746	628	697	0	603	247	187	0	69	0	256	1,548	37,195
Waterford	(Coastal)	k2	Annestown (Stream)	23,221	3,081	1,171	1,023	968	495	265	487	282	227	915	148	1,276	2,216	28,495

Appendix 11. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Lismore Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Lismore (all systems)									**9,680,565**	**9,654,146**					**38,933**	**38,933**
Lismore	Blackwater	190	3,317,433,286		18				9,320,230	9,293,811					38,933	38,933
Lismore	Womanagh	191	150,356,871		19				212,297	212,297					0	0
Lismore	Coastal	q2	18,358,143		19				10,568	10,568					0	0
Lismore	Coastal	p2	82,659,811		17				87,445	87,445					0	0
Lismore	Coastal	r2	60,785,641		19				50,025	50,025					0	0
Lismore (SAL)									**9,340,439**	**9,314,020**					**34,401**	**34,401**
Lismore	(Blackwater)	190		Blackwater (River)	18	18B02	SAL	59	7,728,122	7,701,703	1.8	21.6	1.8	21.7	34,401	34,401
Lismore	(Blackwater)	190		Glenshelane (River)	18	18G11	SAL	58	92,191	92,191	0.0	0.0	0.0	0.0	0	0
Lismore	(Blackwater)	190		Finisk (River)	18	18F02	SAL	57	294,352	294,352	0.0	0.0	0.0	0.0	0	0
Lismore	(Blackwater)	190		Bride (River)	18	18B05	SAL	60	884,654	884,654	3.8	14.4	3.8	14.4	0	0
Lismore	(Blackwater)	190		Licky (River)	18	18L01	SAL	55	76,032	76,032	0.0	44.2	0.0	44.2	0	0
Lismore	(Blackwater)	190		Tourig (River)	18	18T03	SAL	61	60,132	60,132	0.0	0.0	0.0	0.0	0	0
Lismore	(Womanagh)	191		Womanagh (River)	19	19W01	SAL	62	204,956	204,956	19.7	22.9	19.7	22.9	0	0
Lismore (ST only)									**42,505**	**42,505**					**0**	**0**
Lismore	(Blackwater)	190		Goish (River)	18	18G12	ST	56	42,505	42,505	0.0	4.8	0.0	4.8	0	0

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% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
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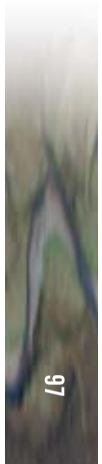

Appendix 12. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Lismore Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Lismore (SAL)																		
Lismore	(Blackwater)	190	Blackwater (River)	5,809,802	459,359	277,954	203,767	177,546	126,846	115,278	93,528	55,609	51,032	330,980	71,853	366,467	521,456	6,741,927
Lismore	(Blackwater)	190	Glenshelane (River)	31,138	4,866	10,284	3,369	13,444	4,505	3,425	2,857	2,740	1,806	13,757	4,923	13,380	25,168	48,720
Lismore	(Blackwater)	190	Finisk (River)	169,765	26,431	8,058	13,642	12,698	16,602	19,985	7,521	6,212	1,975	11,463	1,688	17,962	58,286	216,415
Lismore	(Blackwater)	190	Bride (River)	660,519	71,598	31,698	33,280	16,176	12,900	13,598	9,190	5,264	3,690	26,741	3,872	31,824	53,216	795,742
Lismore	(Blackwater)	190	Licky (River)	39,152	10,428	8,037	5,140	911	4,155	874	1,003	591	822	4,920	1,459	4,874	7,010	62,689
Lismore	(Blackwater)	190	Tourig (River)	25,531	10,554	6,585	4,227	2,210	2,063	3,745	1,152	1,126	737	2,203	141	3,925	9,170	46,897
Lismore	(Womanagh)	191	Womanagh (River)	132,256	29,969	8,856	6,964	3,546	3,198	3,694	2,025	2,326	1,579	10,543	1,898	12,550	13,276	177,232
Lismore (ST only)																		
Lismore	(Blackwater)	190	Goish (River)	25,131	3,413	1,917	4172	1,833	864	716	1,206	201	290	2764	674	2,703	4496	34,632

Appendix 13. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Cork Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Cork (all systems)									**9,657,519**	**7,131,033**					**15,106,285**	**2,398,544**
Cork	Owennacurra	192	166,765,839		19				268,408	268,408					0	0
Cork	Glashaboy	193	146,784,354		19				293,429	293,429					6,361	6,361
Cork	Glengariff	219	42,360,998		21				162,540	162,540					534,956	534,956
Cork	Adrigole	224	29,394,839		21				123,117	123,117					234,084	234,084
Cork	Coomhola	225	66,768,789		21				282,583	211,273					100,296	0
Cork	Owvane	226	80,749,269		21				326,629	267,210					0	0
Cork	Mealagh	227	55,993,341		21				213,617	61,384					20,148	0
Cork	Lee	228	1,252,389,437		19				3,317,918	1,236,048					12,606,378	19,081
Cork	Bandon	229	598,224,323		20				1,729,076	1718,110					556,405	556,405
Cork	Owenboy	230	142,618,286		19				244,697	244,697					0	0
Cork	Stick	231	81,203,770		20				116,895	116,895					0	0
Cork	Argideen	232	149,878,711		20				290,864	290,864					0	0
Cork	Ilen	233	296,660,623		20				907,812	757,124					1,704	1,704
Cork	Roury	234	37,687,470		20				67,418	67,418					135,244	135,244
Cork	Leamawaddra	235	21,111,886		20				45,350	45,350					0	0
Cork	Bawnaknockane	236	42,248,064		20				103,948	103,948					0	0
Cork	Four Mile Water	237	32,119,056		21				108,207	108,207					0	0
Cork	Coastal	a3	2,084,936		20				1,615	1,615					0	0
Cork	Coastal	b3_20	84,532,454		20				51,210	51,210					26,074	26,074
Cork	Coastal	b3_21	81,114,907		21				60,064	60,064					0	0
Cork	Coastal	c3	99,041,307		21				146,046	146,046					84,063	84,063
Cork	Coastal	d3	4,622,983		21				3,713	3,713					240,827	240,827
Cork	Coastal	e3	27,976,393		21				53,691	53,691					0	0
Cork	Coastal	f3	47,698,219		21				113,528	113,528					0	0
Cork	Coastal	s2	58,450,709		19				11,517	11,517					16,904	16,904
Cork	Coastal	t2	64,019,718		19				35,891	35,891					0	0
Cork	Coastal	u2	83,616,628		20				65,850	65,850					0	0
Cork	Coastal	v2	8,078,071		20				2827	2,827					0	0
Cork	Coastal	w2	90,219,308		20				75,544	75,544					0	0
Cork	Coastal	x2	185,550,170		20				138,350	138,350					182,912	182,912
Cork	Coastal	y2	91,903,875		20				18,300	18,300					190,829	190,829

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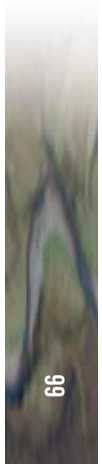

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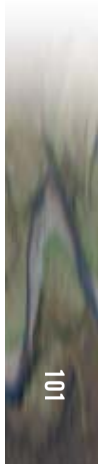
DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Cork	Coastal	z2	29,730,311		20				23,631	23,631					0	0
Cork	Coastal	r2	92,570,259		19				45,523	45,523					0	0
Cork	Coastal	g3	100,147,133		21				207,711	207,711					169,100	169,100
Cork (SAL)									**7,241,815**	**4,715,328**					**14,022,420**	**1,314,679**
Cork	(Glengariff)	219		Glengarriff (River)	21	21G03	SAL	80	162,540	162,540	0.0	0.0	0.0	0.0	534,956	534,956
Cork	(Adrigole)	224		Ardrigole (River)	21	21A01	SAL	81	118,834	118,834	0.0	0.0	0.0	0.0	218,644	218,644
Cork	(Coomhola)	225		Coomhola (River)	21	21C03	SAL	79	282,583	211,273	0.0	0.0	0.0	0.0	100,296	0
Cork	(Owvane)	226		Owvane (River)	21	21O07	SAL	78	326,629	267,210	9.5	9.5	11.7	11.7	0	0
Cork	(Mealagh)	227		Mealagh (River)	21	21M01	SAL	77	213,617	61,384	0.0	0.0	0.0	0.0	20,148	0
Cork	(Lee)	228		Lee (River)	19	19L03	SAL	66	3,221,156	1,139,285	1.0	5.3	3.0	12.1	12,591,971	4,674
Cork		228		Lee (River) (nss)					1,923,476						12,587,297	0
Cork	(Bandon)	229		Bandon (River)	20	20B02	SAL	69	1,663,070	1,652,104	6.0	22.9	6.1	23.1	556,405	556,405
Cork	(Argideen)	232		Ardigeen (River)	20	20A02	SAL	70	282,954	282,954	0.0	40.6	0.0	40.6	0	0
Cork	(Ilen)	233		Keal (Stream)	20		SAL	73	13,399	13,399					0	0
Cork	(Ilen)	233		Ilen (River)	20	20I01	SAL	72	848,826	698,138	0.0	0.0	0.0	0.0	0	0
Cork	(Four Mile Water)	237		Four Mile (Water)	21	21F02	SAL	76	108,207	108,207	0.0	0.0	0.0	0.0	0	0
Cork (ST only)									**1,097,452**	**1,097,452**					**141,605**	**141,605**
Cork	(Owennacurra)	192		Owennacurra (River)	19	19O03	ST	64	190,481	190,481	0.0	0.0	0.0	0.0	0	0
Cork	(Owennacurra)	192		Dungourney (River)	19	19D07	ST	63	77,927	77,927	0.0	0.0	0.0	0.0	0	0
Cork	(Glashaboy)	193		Glashaboy (River)	19	19G01	ST	65	293,429	293,429	1.4	9.3	1.4	9.3	6,361	6,361
Cork	(Owenboy)	230		Owenboy (River)	19	19O01	ST	67	240,054	240,054	0.0	0.0	0.0	0.0	0	0
Cork	(Stick)	231		Stick (River)	20	20S03	ST	68	78,845	78,845	3.3	10.3	3.3	10.3	0	0
Cork	(Roury)	234		Roury (River)	20	20R02	ST	71	67,418	67,418	0.0	0.0	0.0	0.0	135,244	135,244
Cork	(Leamawaddra)	235		Leamawaddra (River)	20	20L01	ST	74	45,350	45,350	0.0	0.0	0.0	0.0	0	0
Cork	(Bawnaknockane)	236		Bawnaknockane (River)	20	20B03	ST	75	103,948	103,948	0.0	0.0	0.0	0.0	0	0

DISTRICT = Fisheries District
CATCHMENT = OS catchment name
OS CAT NO = OS river catchment number
CAT AREA = Catchment area (m^2)
Fishery System = OS River Name (or local name where OS name absent) of fishery
EPA HA = EPA Hydrometric area
EPA RVC = EPA River Code
FB Type = Fisheries Board System Classification
FB Code = Fisheries Board River Code
FLUV TOT = Total Fluvial Habitat (m^2)
FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 14. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Cork Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Cork (SAL)																		
Cork	(Glengariff)	219	Glengarriff (River)	58,495	10,980	9,631	6,519	6,822	6,560	5,462	3,745	3,753	4,082	46,489	20,029	34,296	22,589	85,626
Cork	(Adrigole)	224	Ardrigole (River)	28,534	10,332	10,191	5,743	4,961	5,443	2,319	4,417	1,984	1,752	43,159	23,362	23,533	17,139	54,800
Cork	(Coomhola)	225	Coomhola (River)	62,279	46,929	8,413	10,694	7,606	8,155	11,155	5,030	5,231	8,841	36,941	15,703	35,309	31,946	128,315
Cork	(Owvane)	226	Owvane (River)	109,991	56,825	8,834	8,498	21,460	11,371	11,302	7,237	3,219	4,268	24,204	5,304	26,387	51,370	184,149
Cork	(Mealagh)	227	Mealagh (River)	24,138	13,485	3,350	1,865	3,348	3,032	655	645	1,105	958	8,804	1,405	9,463	7,679	42,837
Cork	(Lee)	228	Lee (River)	726,315	158,047	57,826	53,873	27,240	23,027	20,092	15,267	6,434	8,410	42,754	11,571	46,027	85,626	996,061
Cork		228	Lee (River) (nss)															
Cork	(Bandon)	229	Bandon (River)	1,133,332	151,566	75,362	58,403	41,924	25,274	30,690	20,326	14,377	13,244	87,606	20,253	95,019	123,227	1,413,605
Cork	(Argideen)	232	Ardigeen (River)	209,214	22,018	13,771	5,557	2,706	5,531	2,688	3,094	2,817	1,261	14,297	3,084	15,291	14,019	250,561
Cork	(Ilen)	233	Keal (Stream)	2,764	3,453	321	380	484	2,803	105	230	214	974	1,670	614	2,244	3,622	6,918
Cork	(Ilen)	233	Ilen (River)	388,069	106,335	51,683	42,357	28,714	17,111	14,118	10,379	6,868	5,187	27,319	6,199	33,174	70,432	588,333
Cork	(Four Mile Water)	237	Four Mile (Water)	44,498	21,122	11,717	6,608	4,030	4,008	2,812	2,473	1,576	1,781	7,582	1,557	10,181	12,523	83,945
Cork (ST only)																		
Cork	(Owennacurra)	192	Owennacurra (River)	96,746	25,897	29,583	6,929	5,653	3,123	4,078	4,003	2,063	1,376	11,031	2,672	11,797	16,857	159,155
Cork	(Owennacurra)	192	Dungourney (River)	44,492	12,099	5,016	3,454	1,553	753	2,354	882	1,528	861	4,935	743	6,580	5,542	65,061
Cork	(Glashaboy)	193	Glashaboy (River)	137,204	52,342	23,422	30,709	16,615	10,557	6,983	5,039	3,308	2,250	5,001	1,226	9,332	39,462	243,409
Cork	(Owenboy)	230	Owenboy (River)	161,442	14,388	16,348	11,674	7,591	3,107	5,071	2,984	3,482	2,539	11,429	3,139	14,311	18,751	203,852
Cork	(Stick)	231	Stick (River)	40,211	15,245	13,148	1,138	4,276	1,505	79	736	650	407	1,450	306	2,241	6,556	69,742
Cork	(Roury)	234	Roury (River)	38,242	9,811	3,717	3,165	1,441	2,133	1,730	1,537	606	975	4,061	1,111	4,530	6,840	54,936
Cork	(Leamawaddra)	235	Leamawaddra (River)	17,478	4,363	4,199	2,718	3,745	3,360	1,573	2,478	882	806	3,747	501	4,934	11,317	28,598
Cork	(Bawnaknockane)	236	Bawnaknockane (River)	35,624	18,882	10,259	7,644	11,167	4,924	2,657	3,664	1,385	756	6,987	1,731	7,396	22,412	72,409



Appendix 15. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m²) data for the Kerry Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Kerry (all systems)									**10,394,258**	**10,119,596**					**61,405,528**	**59,492,750**
Kerry	Tyshe	195	23,244,690		23				33,519	33,519					0	0
Kerry	Lee	196	99,465,513		23				370,659	370,659					0	0
Kerry	Maine	197	406,136,617		22				1,074,572	1,074,572					0	0
Kerry	Groin	198	7,643,694		22				22,026	22,026					0	0
Kerry	Owencashla	199	17,114,694		23				55,887	55,887					283,035	283,035
Kerry	Owenascaul	200	39,606,830		22				125,295	125,295					256,564	256,564
Kerry	Scorid	201	28,993,289		23				65,083	65,083					425,558	425,558
Kerry	Owenalondrig	202	28,214,765		22				58,456	58,456					0	0
Kerry	Owenmore	203	38,773,877		23				71,443	71,443					543,775	543,775
Kerry	Owennafeana	204	17,128,698		23				45,520	45,520					0	0
Kerry	Feoghanagh	205	31,208,600		23				101,255	101,255					10,810	10,810
Kerry	Stream	206	28,836,797		22				51,528	51,528					0	0
Kerry	Laune	207	829,550,821		22				2,600,989	2,375,922					28,754,968	28,010,297
Kerry	Caragh	208	172,241,437		22				587,186	587,186					6,929,057	6,929,057
Kerry	Behy	209	49,127,503		22				94,655	94,655					1,419,413	1,419,413
Kerry	Ferta	210	54,711,945		22				132,368	132,368					0	0
Kerry	Carhan	211	27,740,979		22				59,917	59,917					0	0
Kerry	Inny	212	123,021,656		21				436,214	436,214					29,401	29,401
Kerry	Cummeragh	213	117,323,786		21				270,377	266,976					15,547,809	15,274,805
Kerry	Sneem	214	87,142,662		21				322,836	322,836					296,178	296,178
Kerry	Blackwater	215	89,100,346		21				353,999	353,999					398,044	398,044
Kerry	Finnihy	216	32,981,694		21				93,458	93,458					0	0
Kerry	Roughty	217	206,825,394		21				869,984	869,984					183,061	183,061
Kerry	Sheen	218	93,509,375		21				428,784	417,944					0	0
Kerry	Clonee	220	28,683,180		21				65,639	51,564					2,377,093	2,146,267
Kerry	Owenshagh	221	32,564,431		21				224,097	224,097					13,268	13,268
Kerry	Croanshagh	222	40,101,590		21				203,271	203,271					600,056	600,056
Kerry	Kealincha	223	21,542,421		21				88,633	88,633					0	0
Kerry	Coastal	a4	56,519,390		23				74,471	74,471					0	0
Kerry	Coastal	h3	57,828,675		21				121,117	99,838					832,039	167,762
Kerry	Coastal	i3	17,491,487		21				30,954	30,954					0	0

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Kerry	Coastal	j3	36,421,301		21				55,439	55,439					185,918	185,918
Kerry	Coastal	k3	27,779,016		21				26,649	26,649					0	0
Kerry	Coastal	l3	34,185,369		21				49,562	49,562					168	168
Kerry	Coastal	m3	70,809,456		21				155,742	155,742					22,204	22,204
Kerry	Coastal	n3	6,244,309		21				7,740	7,740					0	0
Kerry	Coastal	o3_21	62,553,220		21				78,985	78,985					0	0
Kerry	Coastal	o3_22	70,094,024		22				113,600	113,600					0	0
Kerry	Coastal	o3_22 va	25,968,841		22				11,124	11,124					0	0
Kerry	Coastal	p3	2,787,734		22				0	0					0	0
Kerry	Coastal	q3	69,794,224		22				32,570	32,570					0	0
Kerry	Coastal	r3	41,608,884		22				27,076	27,076					679,752	679,752
Kerry	Coastal	t3_22	80,371,049		22				151,145	151,145					0	0
Kerry	Coastal	t3_23	80,231,700		23				177,891	177,891					84,646	84,646
Kerry	Coastal	u3	24,051,922		22				8,686	8,686					0	0
Kerry	Coastal	v3	29,919,708		22				34,570	34,570					0	0
Kerry	Coastal	w3_22	50,512,801		22				33,659	33,659					0	0
Kerry	Coastal	w3_23	44,138,664		23				32,800	32,800					0	0
Kerry	Coastal	x3	23,997,143		23				51,040	51,040					0	0
Kerry	Coastal	z3	45,548,642		23				62,591	62,591					1,402,003	1,402,003
Kerry	Coastal	g3	43,819,926		21				76,816	76,816					9,751	9,751
Kerry	Coastal	b4	61,615,282		23				72,381	72,381					120,957	120,957
Kerry (SAL)									**8,797,110**	**8,522,449**					**58,520,473**	**56,607,695**
Kerry	(Lee)	196		Lee (River)	23	23L01	SAL	117	367,655	367,655	12.5	31.8	12.5	31.8	0	0
Kerry	(Maine)	197		Maine (River)	22	22M01	SAL	107	961,799	961,799	0.7	4.6	0.7	4.6	0	0
Kerry	(Owenascaul)	200		Owenascaul (River)	22	22O02	SAL	109	125,295	125,295	0.0	0.0	0.0	0.0	256,564	256,564
Kerry	(Scorid)	201		Scorid (River)	23	23S01	SAL	115	31,065	31,065	0.0	0.0	0.0	0.0	425,558	425,558
Kerry	(Owenmore)	203		Owenmore (River)	23	23O03	SAL	114	65,361	65,361	0.0	0.0	0.0	0.0	543,775	543,775
Kerry	(Feoghanagh)	205		Feohanagh (River)	23	23F02	SAL	112	100,979	100,979	0.0	0.0	0.0	0.0	10,810	10,810
Kerry	(Stream)	206		Milltown (River)	22	22M03	SAL	111	51,528	51,528	43.5	57.8	43.5	57.8	0	0
Kerry	(Laune)	207		Laune (River)	22	22L01	SAL	106	2,482,704	2,265,312	0.6	6.3	0.7	6.9	28,418,286	27,969,380
Kerry	(Laune)	207		Cottoners (River)	22	22C05	SAL	105	116,938	109,263	0.0	2.4	0.0	2.6	322,055	26,290
Kerry	(Caragh)	208		Caragh (River)	22	22C02	SAL	104	586,454	586,454	0.0	0.0	0.0	0.0	6,911,501	6,911,501

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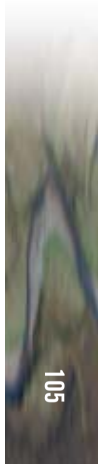
DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Kerry	(Behy)	209		Behy (River)	22	22B02	SAL	103	94,655	94,655	0.0	0.0	0.0	0.0	1,419,413	1,419,413
Kerry	(Ferta)	210		Ferta (River)	22	22F01	SAL	102	132,368	132,368	6.0	6.0	6.0	6.0	0	0
Kerry	(Carhan)	211		Carhan (River)	22	22C03	SAL	101	59,917	59,917	0.0	39.1	0.0	39.1	0	0
Kerry	(Inny)	212		Inny (River)	21	21I01	SAL	98	436,214	436,214	0.0	24.7	0.0	24.7	29,401	29,401
Kerry	(Cummeragh)	213		Currane (River)	21		SAL	97	270,377	266,976					15,547,809	15,274,805
Kerry	(Sneem)	214		Sneem (River)	21	21S03	SAL	92	247,232	247,232	0.0	0.0	0.0	0.0	296,178	296,178
Kerry	(Sneem)	214		Owreagh (River)	21	21O05	SAL	93	73,895	73,895	0.0	0.0	0.0	0.0	0	0
Kerry	(Blackwater)	215		Blackwater (River)	21	21B03	SAL	90	353,999	353,999	0.0	0.0	0.0	0.0	398,044	398,044
Kerry	(Finnihy)	216		Finnihy (River)	21	21F01	SAL	89	93,458	93,458	0.0	11.1	0.0	11.1	0	0
Kerry	(Roughty)	217		Roughty (River)	21	21R01	SAL	88	869,984	869,984	0.0	0.0	0.0	0.0	183,061	183,061
Kerry	(Sheen)	218		Sheen (River)	21	21S01	SAL	87	428,784	417,944	0.0	0.0	0.0	0.0	0	0
Kerry	(Clonee)	220		Cloonee (River)	21	21C06	SAL	86	65,639	51,564	0.0	24.3	0.0	30.9	2,377,093	2,146,267
Kerry	(Owenshagh)	221		Owenshagh (River)	21	21O08	SAL	85	224,097	224,097	0.0	0.0	0.0	0.0	13,268	13,268
Kerry	(Croanshagh)	222		Croanshagh (River)	21	21C05	SAL	84	203,271	203,271	0.0	0.0	0.0	0.0	600,056	600,056
Kerry	(Kealincha)	223		Kealincha (River)	21	21K02	SAL	82	88,633	88,633	0.0	0.0	0.0	0.0	0	0
Kerry	(Coastal)	h3		Lough Fadda (Stream)	21	21L03	SAL	83	85,634	64,356	0.0	0.0	0.0	0.0	767,433	103,156
Kerry	(Coastal)	l3		Tahilla (River)	21	21T01	SAL	91	42,592	42,592	5.6	5.6	5.6	5.6	168	168
Kerry	(Coastal)	o3_21		Emlaghmore (River)	21	21E01	SAL	99	50,539	50,539	22.0	22.0	22.0	22.0	0	0
Kerry	(Coastal)	o3_22		Caol	22	0	SAL	100	3,727	3,727	0.0	0.0	0.0	0.0	0	0
Kerry	(Coastal)	t3_22		Emlagh (River)	22	22E01	SAL	108	82,317	82,317	0.0	0.0	0.0	0.0	0	0
Kerry (ST only)									**242,911**	**242,911**					**283,035**	**283,035**
Kerry	(Owencashla)	199		Owencashla (River)	23	23O02	ST	116	55,887	55,887	0.0	0.0	0.0	0.0	283,035	283,035
Kerry	(Owenalondrig)	202		Owenalondrig (River)	22	22O01	ST	110	58,456	58,456	19.7	19.7	19.7	19.7	0	0
Kerry	(Owennafeana)	204		Owennafeana (River)	23	23O04	ST	113	45,520	45,520	0.0	0.0	0.0	0.0	0	0
Kerry	(Coastal)	m3		Coomnahorna (River)	21		ST	96	34,595	34,595					0	0
Kerry	(Coastal)	m3		Gowla (River)	21		ST	95	20,802	20,802					0	0
Kerry	(Coastal)	m3		Staigue (River)	21		ST	94	27,651	27,651					0	0

DISTRICT = Fisheries District
CATCHMENT = OS catchment name
OS CAT NO = OS river catchment number
CAT AREA = Catchment area (m^2)
Fishery System = OS River Name (or local name where OS name absent) of fishery
EPA HA = EPA Hydrometric area
EPA RVC = EPA River Code
FB Type = Fisheries Board System Classification
FB Code = Fisheries Board River Code
FLUV TOT = Total Fluvial Habitat (m^2)
FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 16. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Kerry Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Kerry (SAL)																		
Kerry	(Lee)	196	Lee (River)	185,098	43,523	23,644	21,147	16,086	8,294	12,519	9,750	4,286	4,147	39,163	9,890	37,981	46,373	273,411
Kerry	(Maine)	197	Maine (River)	628,808	121,555	52,718	31,000	29,322	14,764	11,290	10,909	6,032	4,467	50,935	13,644	48,099	67,077	832,979
Kerry	(Owenascaul)	200	Owenascaul (River)	28,215	18,501	20,354	5,901	8,665	6,536	7,082	5,903	3,242	2,225	18,671	5,239	18,899	28,186	72,970
Kerry	(Scorid)	201	Scorid (River)	5,022	1,081	4,262	2,013	2,909	1,998	4,196	806	1,231	710	6,838	2,270	6,509	9,909	12,378
Kerry	(Owenmore)	203	Owenmore (River)	11,911	5,868	9,923	5,711	6,948	4,637	3,872	2,344	1,772	2,245	10,130	4,091	10,056	17,801	33,413
Kerry	(Feoghanagh)	205	Feohanagh (River)	31,186	13,405	10,387	5,252	4,742	6,601	3,240	3,609	2,772	2,245	17,541	7,663	14,895	19,143	59,279
Kerry	(Stream)	206	Milltown (River)	8,493	13,552	7,090	4,723	3,653	1,721	1,866	1,673	925	800	7,031	1,671	7,085	8,914	33,858
Kerry	(Laune)	207	Laune (River)	1,638,876	139,032	72,229	45,037	48,791	37,499	35,221	27,513	20,047	16,071	184,996	74,773	146,784	150,749	1,893,006
Kerry	(Laune)	207	Cottoners (River)	20,273	29,889	19,277	11,107	8,914	4,124	2,063	2,508	1,542	706	8,859	2,204	9,406	17,155	80,499
Kerry	(Caragh)	208	Caragh (River)	180,980	113,117	53,326	30,017	32,346	29,926	19,015	14,056	11,151	9,143	93,378	33,127	80,917	96,367	376,044
Kerry	(Behy)	209	Behy (River)	14,282	13,730	10,357	6,558	8,829	6,409	5,258	5,665	3,677	2,511	17,381	3,337	20,231	26,391	44,696
Kerry	(Ferta)	210	Ferta (River)	40,780	9,744	17,175	8,203	8,052	6,920	6,182	5,471	4,655	5,920	19,265	6,664	23,177	26,626	75,901
Kerry	(Carhan)	211	Carhan (River)	24,895	8,181	7,514	3,107	4,829	2,322	1,790	1,403	1,327	1,107	3,441	369	5,506	10,344	43,698
Kerry	(Inny)	212	Inny (River)	169,915	55,003	55,049	23,853	32,413	22,295	15,044	11,738	7,649	4,867	38,386	10,701	40,202	82,338	302,974
Kerry	(Cummeragh)	213	Currane (River)	106,241	25,972	17,565	18,735	13,491	10,641	8,983	7,172	5,144	6,152	46,879	21,991	36,388	40,108	168,489
Kerry	(Sneem)	214	Sneem (River)	82,805	22,314	25,720	16,477	16,717	14,678	9,420	9,039	6,535	3,541	39,987	12,521	37,630	49,890	147,190
Kerry	(Sneem)	214	Owreagh (River)	26,345	9,408	7,677	6,602	4,334	3,101	2,611	2,665	1,745	1,516	7,889	2,366	8,785	12,729	50,015
Kerry	(Blackwater)	215	Blackwater (River)	100,050	42,541	40,022	30,303	29,525	19,354	13,760	10,156	7,475	6,783	54,030	16,887	51,580	72,898	212,635
Kerry	(Finnihy)	216	Finnihy (River)	41,376	7,207	8,739	4,373	4,354	3,980	3,464	2,127	1,966	1,843	14,029	4,645	13,193	13,925	61,695
Kerry	(Roughty)	217	Roughty (River)	316,180	68,940	66,949	40,736	47,965	32,280	43,859	23,025	24,619	14,171	191,260	66,101	164,370	150,575	488,938
Kerry	(Sheen)	218	Sheen (River)	180,124	32,411	32,822	27,092	16,688	16,706	11,814	13,668	9,819	7,213	69,587	25,569	61,050	58,877	272,449
Kerry	(Clonee)	220	Cloonee (River)	26,668	3,913	5,114	568	3,203	1,424	1,697	1,321	1,186	567	5,903	2,668	4,988	7,646	36,262
Kerry	(Owenshagh)	221	Owenshagh (River)	96,707	13,317	7,652	5,222	9,064	9,317	5,141	7,267	5,555	1,238	63,617	37,809	32,601	30,821	122,866
Kerry	(Croanshagh)	222	Croanshagh (River)	110,083	11,709	6,535	2,171	5,488	3,499	845	5,322	3,152	511	53,955	36,129	21,489	15,353	130,300
Kerry	(Kealincha)	223	Kealincha (River)	16,421	11,237	8,557	6,116	5,932	5,520	3,116	4,139	2,187	2,737	22,670	10,934	16,661	19,083	41,955
Kerry	(Coastal)	h3	Lough Fadda (Stream)	11,612	9,754	12,269	3,393	8,312	3,596	3,058	2,589	1,413	822	7,540	2,552	7,222	17,555	37,027
Kerry	(Coastal)	l3	Tahilla (River)	10,096	4,368	3,859	4,107	4,738	4,100	2,794	1,499	1,512	1,126	4,392	533	6,497	13,131	22,430
Kerry	(Coastal)	o3_21	Emlaghmore (River)	20,778	3,508	10,740	2,138	5,445	877	2,874	288	893	98	2,902	579	3,314	9,483	37,163
Kerry	(Coastal)	o3_22	Caol	392	230	58	338	1,029	395	351	346	154	69	364	45	543	2,122	1,018
Kerry	(Coastal)	t3_22	Emlagh (River)	22,509	8,448	7,434	5,883	11,821	4,178	2,984	1,784	1,357	1,199	14,719	3,665	13,611	21,011	44,030
Kerry (ST only)																		
Kerry	(Owencashla)	199	Owencashla (River)	16,676	3,355	13,468	3,239	2,565	3,104	2,243	2,375	1,044	792	7,026	3,110	5,753	10,286	36,738
Kerry	(Owenalondrig)	202	Owenalondrig (River)	17,589	3,419	6,873	2,276	3,357	3,359	1,803	2,634	1,530	1,053	14,563	4,132	13,015	11,152	30,157
Kerry	(Owennafeana)	204	Owennafeana (River)	1,170	1,270	1,621	1,931	2,193	2368	4,138	3,169	1,287	1,940	24,433	6,882	20,778	11,867	5,993
Kerry	(Coastal)	m3	Coomnahorna (River)	16,952	1,394	1,192	1,598	2,935	967	775	671	207	1,245	6,658	3,428	4,682	5,878	20,607
Kerry	(Coastal)	m3	Gowla (River)	8,192	1,189	649	125	2,208	835	182	226	625	673	5,897	3,406	3,789	3,451	10,156
Kerry	(Coastal)	m3	Staigue (River)	8,686	3,502	2,536	1,309	1,605	1,075	1,179	1,277	1,002	330	5,150	2,124	4,359	5,136	16,033



Appendix 17. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Limerick Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Limerick (all systems)									**48,408,464**	**16,352,475**					**499,519,355**	**20,516,691**
Limerick	Inagh	149	260,054,360		28				740,190	740,190					1,258,806	1,258,806
Limerick	Annagh	150	44,951,852		28				147,418	147,418					0	0
Limerick	Aughaveemagh	151	17,404,586		28				41,375	41,375					0	0
Limerick	Annageeragh	152	65,948,687		28				171,443	171,443					1,458,709	1,458,709
Limerick	Creegh	153	67,027,770		28				158,849	158,849					139,532	139,532
Limerick	Doonbeg	154	143,852,106		28				307,740	307,740					67,632	67,632
Limerick	Shannon Upr	155a	3,741,894,041		26				14,588,936	0					196,138,960	0
Limerick	Shannon Lwr	155b	5,039,023,621		25				12,843,415	3,702,750					140,689,515	367,422
Limerick	Suck	156	1,596,907,561		26				5,624,392	0					3,104,084	
Limerick	Inny	157	1,279,417,468		26				2,701,204	0					41,757,097	
Limerick	Shannon total155a/b, 156, 157		11,657,242,691						35,757,947	3,702,750					381,689,656	367,422
Limerick	Shannon nss			Shannon (River) (nss)	0				30,895,619	0					336,611,731	0
Limerick	Coastal	155c	354,875,367		27				694,210	694,210					6,466,034	6,466,034
Limerick	Shannon Est Sth	155d	2,031,773,002		24				4,874,546	4,874,546					252,207	252,207
Limerick	Shannon Est Nth	155e	327,783,326		27				289,844	289,844					0	0
Limerick	Fergus	158	897,138,547		27				1,828,502	1,828,502					6,674,095	6,674,095
Limerick	Feale	194	1,150,720,060		23				3,233,279	3,232,487					0	0
Limerick	Coastal	c4	22,144,895		23				13,515	13,515					0	0
Limerick	Coastal	d4_27	78,926,885		27				8,048	8,048					0	0
Limerick	Coastal	d4_28	27,596,106		28				5,914	5,914					127,629	127,629
Limerick	Coastal	e4	6,345,117		28				0	0					0	0
Limerick	Coastal	f4	9,570,859		28				4,780	4,780					0	0
Limerick	Coastal	g4	49,584,022		28				90,342	90,342					0	0
Limerick	Coastal	b4	40,010,332		23				6,137	6,137					0	0
Limerick	Coastal	h4	24,824,636		28				34,385	34,385					0	0
Limerick (SAL)									**46,450,964**	**14,394,975**					**148,674,268**	**10,502,205**
Limerick	(Inagh)	149		Inagh (River)	28	28I01	SAL	142	574,980	574,980	0.7	0.7	0.7	0.7	398,287	398,287
Limerick	(Inagh)	149		Aughyvackeen (River)	28	28C05	SAL	143	117,864	117,864	0.0	0.0	0.0	0.0	0	0
Limerick	(Annagh)	150		Annagh (River)	28	28A03	SAL	137	147,418	147,418	0.0	0.0	0.0	0.0	0	0

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Limerick	(Annageeragh)	152		Annageeragh (River)	28	28A02	SAL	135	171,443	171,443	0.0	5.9	0.0	5.9	1,458,709	1,458,709
Limerick	(Creegh)	153		Skivileen (River)	28	28C02	SAL	134	210,312	210,312	0.0	0.0	0.0	0.0	139,532	139,532
Limerick	(Doonbeg)	154		Doonbeg (River)	28	28D02	SAL	133	244,268	244,268	0.0	0.0	0.0	0.0	67,632	67,632
Limerick	(Shannon)155a/b,156,157			Shannon (River)	25	25S01	SAL	128	35,757,947	3,702,750	6.4	36.5	0.5	5.9	381,689,656	6,759
Limerick	(Coastal)	155c		Owenagarney [Ratty] (River)	27	27O01	SAL	130	459,282	459,282	7.6	15.4	7.6	15.4	3,080,973	3,080,973
Limerick	(Shannon Est Sth)	155d		White (River)	24	24O02	SAL	123	189,906	189,906	0.0	11.1	0.0	11.1	0	0
Limerick	(Shannon Est Sth)	155d		Glencorbly (River)	24	24G03	SAL	122	42,568	42,568	0.0	3.4	0.0	3.4	0	0
Limerick	(Shannon Est Sth)	155d		Ballyline (River)	24	24B03	SAL	121	57,023	57,023	21.8	66.8	21.8	66.8	0	0
Limerick	(Shannon Est Sth)	155d		Deel (River)	24	24D04	SAL	125	1,502,689	1,502,689	34.4	48.6	34.4	48.6	91,016	91,016
Limerick	(Shannon Est Sth)	155d		Maigue (River)	24	24M01	SAL	126	2,437,307	2,437,307	3.9	34.5	3.9	34.5	42,761	42,761
Limerick	(Shannon Est Nth)	155e		Cloon (River)	27	27C02	SAL	132	127,310	127,310	0.0	14.1	0.0	14.1	0	0
Limerick	(Fergus)	158		Fergus (River)	27	27F01	SAL	131	1,270,553	1,270,553	9.8	12.0	9.8	12.0	5,216,536	5,216,536
Limerick	(Feale)	194		Galey (River)	23	23G01	SAL	120	629,442	629,442	1.6	14.4	1.6	14.4	0	0
Limerick	(Feale)	194		Feale (River)	23	23F01	SAL	119	2,020,036	2,019,244	0.0	6.5	0.0	6.5	0	0
Limerick	(Feale)	194		Brick (River)	23	23B03	SAL	118	490,616	490,616	35.1	35.1	35.1	35.1	0	0
Limerick (ST only)									**295,111**	**295,111**					**0**	**0**
Limerick	(Aughaveemagh)	151		Aughaveema	28	28A04	ST	136	41,375	41,375	25.6	25.6	25.6	25.6	0	0
Limerick	(Coastal)	155c		Crompaun (River)	27	27C09	ST	129	58,295	58,295	0.0	31.6	0.0	31.6	0	0
Limerick	(Shannon Est Sth)	155d		Ahacronane (River)	24	24A01	ST	124	55,540	55,540	55.0	55.0	55.0	55.0	0	0
Limerick	(Shannon Est Sth)	155d		Ballincurra (Creek)	24		ST	127	50,778	50,778					0	0
Limerick	(Coastal)	g4		Moy (River)	28		ST	141	35,853	35,853					0	0
Limerick	(Coastal)	g4		Freagh (River)	28	28F01	ST	140	13,118	13,118	46.6	46.6	46.6	46.6	0	0
Limerick	(Coastal)	g4		Cloonbony (River)	28		ST	138	40,152	40,152					0	0
Limerick	(Coastal)	g4		Ballyvaskin (River)	28	28B03	ST	139	0	0	n/d	n/d	n/d	n/d	0	0

DISTRICT = Fisheries District
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EPA HA = EPA Hydrometric area
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FB Code = Fisheries Board River Code
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FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
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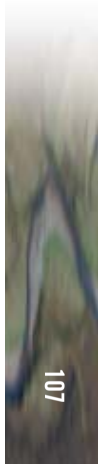
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon



Appendix 18. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Limerick Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Limerick (SAL)																		
Limerick	(Inagh)	149	Inagh (River)	256,079	113,370	72,770	37,988	24,615	17,767	14,494	10,113	5,217	4,857	17,711	2,443	26,228	66,103	480,206
Limerick	(Inagh)	149	Aughyvackeen (River)	51,061	18,892	10,699	5,324	11,542	6,873	620	4,634	2,736	361	5,120	412	7,806	23,669	85,977
Limerick	(Annagh)	150	Annagh (River)	14,117	38,514	37,020	11,039	11,941	9,250	6,911	6,143	4,340	2,161	5,982	795	11,688	34,245	100,690
Limerick	(Annageeragh)	152	Annageeragh (River)	60,011	38,546	17,494	18,297	11,299	8,861	6,170	3,170	2,540	1,993	3,062	164	7,431	30,680	133,168
Limerick	(Creegh)	153	Skivileen (River)	98,553	36,929	27,954	14,894	8,474	9,019	4,923	3,291	1,791	999	3,485	390	5,885	26,691	177,346
Limerick	(Doonbeg)	154	Doonbeg (River)	168,143	23,765	15,153	13,029	9,282	5,074	2,812	2,786	1,104	731	2,389	232	3,993	19,954	220,089
Limerick	(Shannon)155a/b,	156,157	Shannon (River)	2,763,823	261,308	131,083	83,820	98,642	61,133	52,988	38,299	25,779	25,183	124,061	30,461	144,562	251,335	3,239,760
Limerick	(Coastal)	155c	Owenagarney [Patty] (River)	339,247	27,106	11,573	16,535	8,557	9,416	9,583	2,225	4,210	4,002	26,830	6,883	28,158	31,556	392,686
Limerick	(Shannon Est Sth)	155d	White (River)	104,662	20,541	19,389	11,647	6,338	8,423	3,860	3,812	2,381	1,454	7,400	2,109	9,164	24,491	154,141
Limerick	(Shannon Est Sth)	155d	Glencorbly (River)	18,343	1,576	2,806	4,888	3,347	4,951	1,009	493	1,103	407	3,647	844	4,313	9,799	27,612
Limerick	(Shannon Est Sth)	155d	Ballyline (River)	42,902	5,940	2,533	1,334	1,552	1,318	92	371	125	234	624	52	931	3,332	52,708
Limerick	(Shannon Est Sth)	155d	Deel (River)	1,213,032	91,576	18,539	43,141	22,586	16,738	14,673	10,236	8,344	9,380	54,446	14,944	57,226	71,904	1,358,615
Limerick	(Shannon Est Sth)	155d	Maigue (River)	2,100,152	122,398	47,529	36,514	23,323	21,387	20,501	11,219	10,739	8,628	34,918	7,648	46,636	76,430	2,306,593
Limerick	(Shannon Est Nth)	155e	Cloon (River)	74,743	25,410	10,040	4,079	3,988	1,512	2,242	1,530	763	406	2,599	271	3,496	9,271	114,272
Limerick	(Fergus)	158	Fergus (River)	895,656	125,919	53,995	48,207	38,659	25,666	19,316	14,284	8,812	7,812	32,226	4,159	44,692	98,445	1,123,257
Limerick	(Feale)	194	Galey (River)	491,797	34,121	12,792	21,020	9,488	9,782	8,780	6,317	6,306	6,952	22,087	5,402	29,943	34,910	559,186
Limerick	(Feale)	194	Feale (River)	1,339,030	205,834	45,825	101,733	49,271	65,005	42,780	27,039	23,038	13,874	105,815	22,502	120,485	187,041	1,689,216
Limerick	(Feale)	194	Brick (River)	297,683	49,372	31,196	20,772	18,194	13,950	10,801	10,103	5,403	5,793	27,350	3,466	35,226	53,823	398,101
Limerick (ST only)																		
Limerick	(Aughaveemagh)	151	Aughaveema	17,252	15,282	4,211	2,376	230	905	346	152	128	205	288	87	534	1,633	39,121
Limerick	(Coastal)	155c	Crompaun (River)	33,697	2,647	2,853	1,142	3,253	952	2,056	2,360	642	1,926	6,768	1,250	8,086	8,621	40,338
Limerick	(Shannon Est Sth)	155d	Ahacronane (River)	25,446	11,268	8,998	928	1,467	1,326	3,011	764	170	1,169	993	76	2,256	6,569	46,640
Limerick	(Shannon Est Sth)	155d	Ballincurra (Creek)	41,313	3,156	166	722	1,465	570	281	510	368	191	2,036	203	2,391	2,826	45,357
Limerick	(Coastal)	g4	Moy (River)	1,952	2,619	8,960	5,864	2,605	5,412	2,746	1,360	593	454	3,289	961	3,375	12,123	19,395
Limerick	(Coastal)	g4	Freagh (River)	967	1,518	1,480	5,635	1,212	584	385	349	229	143	618	164	826	2,529	9,599
Limerick	(Coastal)	g4	Cloonbony (River)	2,762	7,187	7,063	9,521	4,709	2,720	1,648	1,575	1,098	783	1,086	47	2,921	10,651	26,534
Limerick	(Coastal)	g4	Ballyvaskin (River)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix 19. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Galway Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Galway (all systems)									**9,806,992**	**6,861,182**					**291,541,205**	**185,810,832**
Galway	Crumlin	139	25,155,145	0	31				37,918	37,918					1,147,222	1,147,222
Galway	Owenriff	140	18,559,614	0	31				49,045	49,045					639,765	639,765
Galway	Owenboliska	141	88,764,340	0	31				273,229	273,229					2,681,862	2,681,862
Galway	Knock	142	27,518,181	0	31				62,281	62,281					569,502	569,502
Galway	Corrib	143	3,101,202,981	0	30				6,867,924	4,186,654					277,673,296	171,951,646
Galway	Clarin	144	143,645,349	0	29				211,098	50,915					4,363	0
Galway	Kilcolgan	145	365,752,969	0	29				874,881	874,881					3,016,265	3,016,265
Galway	Kinvarra	146	493,591,260	0	29				1,180,318	1180,318					4,672,649	4,672,649
Galway	Caher	147	20,879,596	0	28				1,993	1,993					0	0
Galway	Aille	148	68,797,403	0	28				149,746	45,389					4,360	0
Galway	Coastal	i4	29,441,050	0	28				0	0					0	0
Galway	Coastal	j4_28	4,560,529	0	28				0	0					0	0
Galway	Coastal	j4_29	128,492,649	0	29				0	0					0	0
Galway	Coastal	k4	31,088,475	0	29				0	0					0	0
Galway	Coastal	l4	106,874,025	0	29				8,830	8,830					0	0
Galway	Coastal	m4	30,723,346	0	31				27,706	27,706					0	0
Galway	Coastal	n4	13,827,090	0	31				13,638	13,638					0	0
Galway	Coastal	o4	12,472,944	0	31				17,797	17,797					345,018	345,018
Galway	Coastal	p4	12,597,158	0	31				1,243	1,243					0	0
Galway	Coastal	h4	6,938,669	0	28				1,469	1,469					0	0
Galway	Coastal	q4	26,436,065	0	31				27,876	27,876					786,903	786,903
Galway (SAL)									**8,253,242**	**5,307,431**					**283,202,813**	**177,472,441**
Galway	(Owenboliska)	141	0	Owenboliska	31	31O01	SAL	149	273,229	273,229	0.0	0.0	0.0	0.0	2,681,862	2,681,862
Galway	(Knock)	142	0	Knock (River)	31	31K01	SAL	148	62,281	62,281	0.0	22.6	0.0	22.6	569,502	569,502
Galway	(Corrib)	143	0	Corrib (River)	30	30C02	SAL	147	6,719,329	4,038,058	6.7	19.1	6.5	16.7	276,932,006	171,210,357
Galway	(Clarin)	144	0	Clarinbridge (River)	29	29C02	SAL	146	191,132	30,949	36.6	40.5	3.8	3.8	4,363	0
Galway	(Kilcolgan)	145	0	Kilcolgan (River)	29	29K01	SAL	145	857,525	857,525	4.8	33.0	4.8	33.0	3,010,720	3,010,720
Galway	(Aille)	148	0	Aille (River)	28	28A01	SAL	144	149,746	45,389	39.3	39.3	35.7	35.7	4,360	0
Galway (ST only)									**86,963**	**86,963**					**1,786,987**	**1,786,987**
Galway	(Crumlin)	139	0	Crumlin (River)	31	31C02	ST	151	37,918	37,918	0.0	16.6	0.0	16.6	1,147,222	1,147,222
Galway	(Owenriff)	140	0	Owenriff [South Galway]	31	31O04	ST	150	49,045	49,045	0.0	0.0	0.0	0.0	639,765	639,765

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FB Code = Fisheries Board River Code
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FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
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% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 20. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Galway Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Galway (SAL)																		
Galway	(Owenboliska)	141	Owenboliska	122,078	47,182	35,393	21,934	8,296	9,737	5,332	3,026	2,294	3,064	14,892	2,373	17,876	26,392	226,587
Galway	(Knock)	142	Knock (River)	24,148	3,966	16,404	5,340	2,685	1,393	1,743	1,016	1,237	706	3,644	525	5,061	6,838	49,857
Galway	(Corrib)	143	Corrib (River)	3,389,543	224,741	75,721	74,306	46,133	39,289	29,770	26,096	14,180	13,458	104,822	35,342	97,117	141,701	3,763,897
Galway	(Clarin)	144	Clarinbridge (River)	28,816	341	0	0	0	0	628	204	0	0	959	0	959	833	29,157
Galway	(Kilcolgan)	145	Kilcolgan (River)	703,473	63,904	15,259	20,360	16,092	6,212	8,438	4,524	3,351	3,390	12,521	1,900	17,363	35,266	802,997
Galway	(Aille)	148	Aille (River)	18,387	4,958	4,799	1,444	2,021	3,624	2,313	1,060	1,036	877	4,870	1,366	5,417	9,018	29,589
Galway (ST only)																		
Galway	(Crumlin)	139	Crumlin (River)	17,734	3,693	5,895	1,607	3,192	1,282	1,033	1,153	509	313	1,507	240	2,090	6,659	28,930
Galway	(Owenriff)	140	Owenriff [South Galway]	26,933	4,075	7,032	1,920	2,212	1,168	912	1,369	316	762	2,346	539	2,886	5,661	39,959

Appendix 21. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Connemara Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Connemara (all systems)									**1,156,527**	**1,100,467**					**29,644,825**	**28,945,330**
Connemara	Ballynahinch	136	173,210,203	0	31				579,966	524,361					10,980,669	10,553,595
Connemara	Owengowla	137	45,288,326	0	31				88,371	88,371					1,447,334	1,447,334
Connemara	Cashla	138	81,479,574	0	31				183,208	182,753					3,408,334	3,135,913
Connemara	Coastal	r4	288,702,777	0	31				255,050	255,050					11,187,406	11,187,406
Connemara	Coastal	s4	21,484,162	0	31				2,645	2,645					0	0
Connemara	Coastal	t4_31	62,347,149	0	31				47,287	47,287					2,621,082	2,621,082
Connemara	Coastal	q4	7,594,116	0	31				0	0					0	0
Connemara (SAL)									**867,759**	**811,701**					**18,023,298**	**17,323,803**
Connemara	(Ballynahinch)	136		Owenmore (River)	31	31R01	SAL	161	579,653	524,049	0.0	0.0	0.0	0.0	10,938,296	10,511,222
Connemara	(Cashla)	138		Cashla (River)	31	31C01	SAL	152	179,316	178,862	0.0	0.0	0.0	0.0	3,328,750	3,056,329
Connemara	(Coastal)	r4		stream (L. Nafurnace)	31		SAL	154	33,108	33,108					777,817	777,817
Connemara	(Coastal)	r4		Screeb	31	31S01	SAL	155	75,682	75,682	0.0	0.0	0.0	0.0	2,978,435	2,978,435
Connemara (ST only)									**202,244**	**202,244**					**6,298,597**	**6,298,597**
Connemara	(Owengowla)	137		Gowlabeg (River)	31	31G03	ST	159	14,574	14,574	0.0	0.0	0.0	0.0	117,475	117,475
Connemara	(Owengowla)	137		Owengowla	31	31O02	ST	160	73,797	73,797	0.0	0.0	0.0	0.0	1,329,859	1,329,859
Connemara	(Coastal)	r4		stream (L. Skannive)	31		ST	158	16,734	16,734					1,407,563	1,407,563
Connemara	(Coastal)	r4		stream (L. Inverbeg)	31		ST	156	18,606	18,606					920,628	920,628
Connemara	(Coastal)	r4		Invermore (River)	31	31I01	ST	157	76,805	76,805	0.0	0.0	0.0	0.0	2,385,715	2,385,715
Connemara	(Coastal)	r4		stream (L Carrafinla)	31		ST	153	1,728	1,728					137,357	137,357

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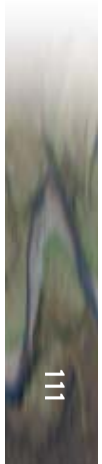
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon



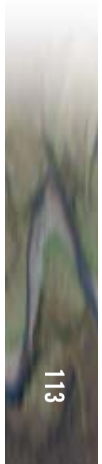
Appendix 22. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Connemara Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Connemara (SAL)																		
Connemara	(Ballynahinch)	136	Owenmore (River)	253,330	58,232	36,204	25,447	27,600	19,805	14,353	12,933	8,827	6,363	60,955	20,448	55,697	75,868	372,036
Connemara	(Cashla)	138	Cashla (River)	97,162	14,485	10,598	8,998	10,057	10,086	2,315	4,223	2,154	2,457	16,326	3,738	17,231	27,203	130,690
Connemara	(Coastal)	r4	stream (L. Nafurnace)	19,251	3,665	3,681	1,343	912	1,123	531	716	341	190	1,355	398	1,488	3,330	27,892
Connemara	(Coastal)	r4	Screeb	39,174	16,027	2,689	6,174	595	3,512	1,161	915	624	484	4,327	573	4,862	6,207	64,041
Connemara (ST only)																		
Connemara	(Owengowla)	137	Gowlabeg (River)	8,048	1,448	704	634	491	619	414	116	282	129	1,689	455	1,645	1,640	10,834
Connemara	(Owengowla)	137	Owengowla	46,641	10,791	4,305	1,813	3,896	1,374	624	1,294	361	304	2,394	411	2,647	7,189	63,550
Connemara	(Coastal)	r4	stream (L. Skannive)	9,222	3,493	1,014	394	803	378	194	299	211	34	691	141	795	1,675	14,123
Connemara	(Coastal)	r4	stream (L. Inverbeg)	6,945	2,328	1,844	908	1,418	1,320	335	974	425	104	2,004	262	2,272	4,048	12,025
Connemara	(Coastal)	r4	Invermore (River)	40,139	12,886	4,823	3,983	4,406	1,735	1,782	1,701	272	1,110	3,967	1,155	4,195	9,624	61,832
Connemara	(Coastal)	r4	stream (L Carrafinla)	1,683	0	0	0	0	0	0	0	0	19	26	26	19	0	1,683

Appendix 23. Fluvial & lacustrine salmon and sea trout wetted area habitat quantity (m^2) data for the Ballinakill Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Ballinakill (all systems)									**2,624,023**	**2,482,028**					**16,480,401**	**14,455,474**
Ballinakill	Carrowbeg	125	50,542,481		32				145,824	145,824					460,061	460,061
Ballinakill	Owenwee	126	47,864,610		32				179,632	171,490					404,453	27,760
Ballinakill	Bunowen	127	74,812,320		32				329,659	291,177					132,740	31,929
Ballinakill	Carrownisky	128	54,445,299		32				184,686	170,599					602,285	602,285
Ballinakill	Owennadornaun	129	16,393,151		32				46,907	46,907					0	0
Ballinakill	Bundorragha	130	48,793,500		32				110,674	95,883					2,135,673	2,135,673
Ballinakill	Erriff	131	167,803,243		32				665,301	606,758					1,712,382	985,075
Ballinakill	Culfin	132	20,790,001		32				75,147	69,199					2,146,539	2,034,746
Ballinakill	Dawros	133	52,383,000		32				271,612	271,612					1,660,519	1,660,519
Ballinakill	Traheen	134	6,726,096		32				18,672	18,672					0	0
Ballinakill	Owenglin	135	35,269,382		32				186,204	186,204					466,039	466,039
Ballinakill	Coastal	a5	7,689,353		32				11,318	11,318					139,273	139,273
Ballinakill	Coastal	b5	12,441,353		32				9,527	9,527					0	0
Ballinakill	Coastal	c5	28,512,335		32				44,032	44,032					3,303	3,303
Ballinakill	Coastal	d5	7,916,535		32				17,477	17,477					36,578	36,578
Ballinakill	Coastal	t4_32	75,120,803		32				79,504	77,502					5,124,350	4,416,027
Ballinakill	Coastal	u4	89,926,072		32				74,323	74,323					1,297,066	1,297,066
Ballinakill	Coastal	v4	12,177,309		32				24,097	24,097					3,885	3,885
Ballinakill	Coastal	w4	31,296,500		32				25,651	25,651					139,773	139,773
Ballinakill	Coastal	x4	39,415,447		32				89,533	89,533					0	0
Ballinakill	Coastal	y4	6,076,493		32				7,294	7,294					0	0
Ballinakill	Coastal	z4	18,546,691		32				20,805	20,805					15,482	15,482
Ballinakill	Coastal	e5	3,803,247		32				6,144	6,144					0	0
Ballinakill (SAL)									**2,076,178**	**1,934,183**					**13,021,122**	**10,996,195**
Ballinakill	(Owenwee)	126		Owenwee (River)	32	32O06	SAL	173	177,468	169,326	0.0	0.0	0.0	0.0	394,477	17,784
Ballinakill	(Bunowen)	127		Bunowen (River)	32	32B03	SAL	172	329,659	291,177	0.0	0.0	0.0	0.0	132,740	31,929
Ballinakill	(Carrownisky)	128		Carrownisky (River)	32	32C01	SAL	171	184,686	170,599	0.0	42.0	0.0	45.4	602,285	602,285
Ballinakill	(Bundorragha)	130		Bundorragha (River)	32	32B01	SAL	169	110,674	95,883	0.0	0.0	0.0	0.0	2,135,673	2,135,673
Ballinakill	(Erriff)	131		Erriff (River)	32	32E01	SAL	168	665,301	606,758	0.0	0.6	0.0	0.6	1,712,382	985,075
Ballinakill	(Culfin)	132		Culfin (River)	32	32C04	SAL	167	75,147	69,199	0.0	0.0	0.0	0.0	2,146,539	2,034,746

continued



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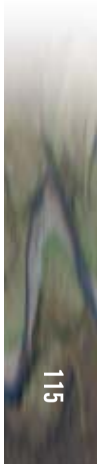
DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Ballinakill	(Dawros)	133		Dawros (River)	32	32D01	SAL	166	271,612	271,612	0.0	0.0	0.0	0.0	1,660,519	1,660,519
Ballinakill	(Traheen)	134		Traheen (River)	32	32T01	SAL	165	18,672	18,672	0.0	0.0	0.0	0.0	0	0
Ballinakill	(Owenglin)	135		Owenglin (River)	32	32O03	SAL	163	186,204	186,204	0.0	0.0	0.0	0.0	466,039	466,039
Ballinakill	(Coastal)	t4_32		Ballinaboy (River)	32	32B07	SAL	162	40,133	38,131	18.4	26.3	19.3	27.7	3,656,925	2,948,602
Ballinakill	(Coastal)	u4		Cleggan (River)	32		SAL	164	16,622	16,622					113,543	113,543
Ballinakill (ST only)									**176,282**	**176,282**					**450,027**	**450,027**
Ballinakill	(Carrowbeg)	125		Carrowbeg (River)	32	32C05	ST	174	138,040	138,040	0.0	0.0	0.0	0.0	450,027	450,027
Ballinakill	(Owennadornaun)	129		Owennadornaun	32	32O07	ST	170	38,242	38,242	0.0	0.0	0.0	0.0	0	0

DISTRICT = Fisheries District
CATCHMENT = OS catchment name
OS CAT NO = OS river catchment number
CAT AREA = Catchment area (m^2)
Fishery System = OS River Name (or local name where OS name absent) of fishery
EPA HA = EPA Hydrometric area
EPA RVC = EPA River Code
FB Type = Fisheries Board System Classification
FB Code = Fisheries Board River Code
FLUV TOT = Total Fluvial Habitat (m^2)
FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 24. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Ballinakill Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Ballinakill (SAL)																		
Ballinakill	(Owenwee)	126	Owenwee (River)	46,735	32,849	25,916	10,587	12,908	8,882	5,260	5,090	2,675	3,331	15,093	3,262	17,838	32,141	116,086
Ballinakill	(Bunowen)	127	Bunowen (River)	155,671	44,748	28,819	17,834	11,541	6,244	7,780	4,166	2,771	1,849	9,752	1,672	12,700	29,732	247,073
Ballinakill	(Carrownisky)	128	Carrownisky (River)	93,605	28,991	16,009	9,777	6,079	3,677	2,882	1,931	1,842	1,087	4,719	1,113	6,535	14,568	148,383
Ballinakill	(Bundorragha)	130	Bundorragha (River)	30,078	10,990	7,462	4,813	5,641	4,589	2,762	3,131	2,300	1,856	22,260	13,446	12,971	16,123	53,343
Ballinakill	(Erriff)	131	Erriff (River)	372,049	63,430	34,040	26,824	21,603	16,544	11,112	10,598	6,777	4,691	39,089	15,296	35,291	60,034	496,138
Ballinakill	(Culfin)	132	Culfin (River)	18,696	11,594	4,394	4,111	5,446	2,584	2,600	2,329	1,158	966	15,320	4,230	13,215	13,043	38,711
Ballinakill	(Dawros)	133	Dawros (River)	83,972	44,197	18,680	15,589	16,669	14,543	14,924	7,405	9,083	6,240	40,309	16,199	39,434	54,479	161,501
Ballinakill	(Traheen)	134	Traheen (River)	3,199	3,047	2,954	3,073	2,106	1,486	692	769	292	137	918	40	1,306	5,086	12,240
Ballinakill	(Owenglin)	135	Owenglin (River)	64,704	37,536	16,875	12,534	11,474	7,613	6,730	4,075	3,297	2,260	19,105	6,131	18,531	30,507	131,035
Ballinakill	(Coastal)	t4_32	Ballinaboy (River)	25,390	6,112	2,055	1,457	966	591	574	229	127	143	486	108	649	2,360	35,015
Ballinakill	(Coastal)	u4	Cleggan (River)	5,207	2,014	1,390	1,419	1,518	2,137	573	364	189	348	1,464	380	1,620	4,592	10,030
Ballinakill (ST only)																		
Ballinakill	(Carrowbeg)	125	Carrowbeg (River)	64,357	24,520	12,903	6,826	6,030	7,153	4,396	3,419	1,398	1,259	5,778	806	7,630	20,997	108,607
Ballinakill	(Owennadornaun)	129	Owennadornaun	7,051	2,350	2,852	2,543	3,369	3,169	2,383	2,554	1,600	2,043	8,327	744	11,226	11,476	14,796



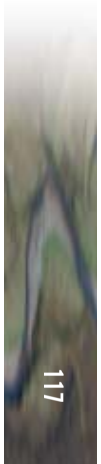
Appendix 25. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m²) data for the Bangor Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Bangor (all systems)									**4,429,069**	**4,332,092**					**23,727,930**	**23,727,930**
Bangor	Glenamoy	100	881,47,612		33				274,259	260,000					0	0
Bangor	Owenmore	105	3,405,53,458		33				1,386,308	1,386,308					9,716,482	9,716,482
Bangor	Owenduff	106	1,316,75,940		33				645,812	645,812					77,875	77,875
Bangor	Srahmore	107	1,003,21,143		32				287,113	224,186					6,081,868	6,081,868
Bangor	Newport	108	1,489,18,058		32				512,934	493,143					4,108,524	4,108,524
Bangor	Rossow	109	333,64,782		32				124,708	124,708					115,823	115,823
Bangor	Moyour	124	480,32,404		32				163,555	163,555					612,964	612,964
Bangor	Muingnabo	98	417,03,635		33				145,629	145,629					0	0
Bangor	Coastal	f5	59,89,131		32				0	0					0	0
Bangor	Coastal	g5	80,02,101		32				12,878	12,878					43,555	43,555
Bangor	Coastal	h5	74,88,968		32				10,644	10,644					24,588	24,588
Bangor	Coastal	i5_32	909,34,499		32				153,088	153,088					0	0
Bangor	Coastal	i5_33	1,472,98,953		33				237,295	237,295					234,650	234,650
Bangor	Coastal	i5_33 achill	1,481,04,710		33				119,511	119,511					958,699	958,699
Bangor	Coastal	j5	440,63,442		33				81,000	81,000					0	0
Bangor	Coastal	k5	256,680,295		33				214,838	214,838					1,752,902	1,752,902
Bangor	Coastal	e5	4,516,156		32				9,982	9,982					0	0
Bangor	Coastal	l5	35,872,706		33				49,515	49,515					0	0
Bangor (SAL)									**3,336,934**	**3,239,957**					**18,348,851**	**18,348,851**
Bangor	(Glenamoy)	100		Glenamoy (River)	33	33G01	SAL	187	274,259	260,000	0.0	0.0	0.0	0.0	0	0
Bangor	(Owenmore)	105		Owenmore (River)	33	33O04	SAL	186	1,386,308	1,386,308	0.0	0.6	0.0	0.6	9,716,482	9,716,482
Bangor	(Owenduff)	106		Owenduff	33	33O01	SAL	185	645,812	645,812	0.0	0.0	0.0	0.0	77,875	77,875
Bangor	(Srahmore)	107		Srahmore (River)	32	32S02	SAL	179	259,032	196,105	3.9	3.9	5.2	5.2	4,405,450	4,405,450
Bangor	(Newport)	108		Newport (River)	32	32N01	SAL	178	512,934	493,143	0.0	0.0	0.0	0.0	4,108,524	4,108,524
Bangor	(Muingnabo)	98		Muingnabo (River)	33	33M02	SAL	188	142,564	142,564	0.0	0.0	0.0	0.0	0	0
Bangor	(Coastal)	i5_32		Owengarve (River)	32	32O02	SAL	181	86,608	86,608	0.0	11.4	0.0	11.4	0	0
Bangor	(Coastal)	i5_33		Cartron (River)	33	33C02	SAL	183	29,417	29,417	27.3	27.3	27.3	27.3	40,520	40,520
Bangor (ST only)									**494,507**	**494,507**					**789,265**	**789,265**
Bangor	(Rossow)	109		Owennabrockagh	32	32O04	ST	176	89,180	89,180	0.0	0.0	0.0	0.0	72,160	72,160
Bangor	(Rossow)	109		Rossow (River)	32		ST	177	35,528	35,528					43,663	43,663
Bangor	(Moyour)	124		Moyour (River)	32	32M01	ST	175	145,919	145,919	0.0	5.4	0.0	5.4	559,041	559,041
Bangor	(Coastal)	i5_32		Bunnahowna (River)	32	32B02	ST	182	22,792	22,792	0.0	18.4	0.0	18.4	0	0
Bangor	(Coastal)	i5_32		Carrowsallagh (River)	32		ST	180	25,479	25,479					0	0
Bangor	(Coastal)	i5_33		Bellagarvaun	33	33B04	ST	184	138,409	138,409	9.2	9.2	9.2	9.2	114,401	114,401
Bangor	(Coastal)	l5		Gweedaney	33	33G06	ST	189	37,200	37,200	28.2	28.2	28.2	28.2	0	0

DISTRICT = Fisheries District
CATCHMENT = OS catchment name
OS CAT NO = OS river catchment number
CAT AREA = Catchment area (m²)
Fishery System = OS River Name (or local name where OS name absent) of fishery
EPA HA = EPA Hydrometric area
EPA RVC = EPA River Code
FB Type = Fisheries Board System Classification
FB Code = Fisheries Board River Code
FLUV TOT = Total Fluvial Habitat (m²)
FLUV ACCES = Total Fluvial Habitat (m²) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower
% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m²)
LAC ACCES = Total Lacustrine Habitat (m²) Accessible to Salmon

Appendix 26. Fluvial salmon (and sea trout) accessible wetted area habitat quality rating data for the Bangor Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Bangor (SAL)																		
Bangor	(Glenamoy)	100	Glenamoy (River)	148,593	23,831	17,404	19,326	10,554	9,279	5,872	4,883	2,763	2,902	14,592	2,381	18,194	35,577	203,849
Bangor	(Owenmore)	105	Owenmore (River)	791,780	161,755	115,043	72,283	57,243	43,858	30,767	25,752	16,700	13,271	57,856	10,617	77,320	162,780	1,135,592
Bangor	(Owenduff)	106	Owenduff	286,971	112,580	61,539	40,743	33,377	18,399	18,022	14,727	8,900	9,187	41,367	9,725	50,037	85,694	500,356
Bangor	(Srahmore)	107	Srahmore (River)	97,165	24,834	17,710	8,738	10,600	4,179	4,083	2,755	5,828	2,355	17,859	6,352	19,690	21,616	148,447
Bangor	(Newport)	108	Newport (River)	294,969	58,271	31,556	19,344	15,918	13,464	9,891	9,100	5,580	4,915	30,135	9,010	31,619	48,540	403,973
Bangor	(Muingnabo)	98	Muingnabo (River)	87,596	19,891	12,110	7,676	4,883	3,500	2,408	1,115	725	707	1,953	227	3,157	12,015	127,164
Bangor	(Coastal)	i5_32	Owengarve (River)	29,672	13,461	8,552	4,907	3,054	3,563	2,496	1,662	2,666	1,578	14,997	5,560	13,680	11,991	55,377
Bangor	(Coastal)	i5_33	Cartron (River)	3,392	2,456	2,225	6,918	2,276	995	3,906	2,037	896	916	3,400	726	4,486	9,214	14,991
Bangor (ST only)																		
Bangor	(Rossow)	109	Owennabrockagh	60,658	10,881	6,158	2,490	2,904	2,276	512	705	488	564	1,543	67	2,527	6,397	80,188
Bangor	(Rossow)	109	Rossow (River)	30,305	2,440	857	724	215	25	130	372	281	0	179	12	448	742	34,326
Bangor	(Moyour)	124	Moyour (River)	97,802	24,597	7,173	5,097	2,334	3,125	1,086	1,587	316	384	2,417	585	2,532	8,132	134,670
Bangor	(Coastal)	i5_32	Bunnahowna (River)	1,889	1,061	1,275	1,362	5,309	1,291	885	1,431	2,231	1,128	4,928	1,089	7,198	8,916	5,588
Bangor	(Coastal)	i5_32	Carrowsallagh (River)	10,166	1,027	1,514	2,162	3,038	1,233	834	735	499	365	3,907	1,000	3,770	5,840	14,869
Bangor	(Coastal)	i5_33	Bellagarvaun	53,817	29,794	8,202	9,891	5,984	6,809	5,401	3,149	2,101	1,480	11,782	2,556	12,807	21,343	101,704
Bangor	(Coastal)	I5	Gweedaney	14,298	3,303	3,682	2,355	2,653	3,728	1,844	1,280	626	843	2,590	244	3,815	9,609	23,533



Appendix 27. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Ballina Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Ballina (all systems)									**9,943,670**	**9,524,125**					**74,717,406**	**70,442,580**
Ballina	Glencullen	101	19,529,282		33				61,519	61,519					0	0
Ballina	Ballinglen	102	44,765,980		33				162,656	162,656					0	0
Ballina	Cloonaghmore	104	130,323,986		34				545,010	545,010					18,653	18,653
Ballina	Moy	110	2,108,550,865		34				8,086,071	7,666,526					73,017,261	68,742,435
Ballina	Bellawaddy	111	19,097,481		34				50,521	50,521					0	0
Ballina	Leaffony	112	37,848,630		34				90,486	90,486					0	0
Ballina	Finned	113	19,446,694		35				49,622	49,622					0	0
Ballina	Easky	114	101,348,828		35				540,375	540,375					1,235,832	1,235,832
Ballina	Belderg	99	23,736,928		33				39,853	39,853					388,858	388,858
Ballina	Coastal	m5	31,419,939		33				56,141	56,141					0	0
Ballina	Coastal	n5	66,536,782		33				153,287	153,287					0	0
Ballina	Coastal	o5_33	3,530,956		33				2,652	2,652					0	0
Ballina	Coastal	o5_34	6,314,746		34				1,629	1,629					0	0
Ballina	Coastal	p5	18,663,703		34				13,845	13,845					56,802	56,802
Ballina	Coastal	q5	18,659,181		34				35,768	35,768					0	0
Ballina	Coastal	r5_34	2,476,291		34				0	0					0	0
Ballina	Coastal	r5_35	4,106,153		35				0	0					0	0
Ballina	Coastal	s5	13,527,103		35				26500	26,500					0	0
Ballina	Coastal	l5	25,250,123		33				27,735	27,735					0	0
Ballina	Coastal	t5	1,576,294		35				0	0					0	0
Ballina (SAL)									**9,301,174**	**8,881,629**					**74,122,826**	**69,847,999**
Ballina	(Ballinglen)	102		Ballinglen (River)	33	33B01	SAL	193	162,656	162,656	0.0	0.0	0.0	0.0	0	0
Ballina	(Cloonaghmore)	104		Cloonaghmore (River)	34	34C03	SAL	194	545,722	545,722	0.0	0.0	0.0	0.0	18,653	18,653
Ballina	(Moy)	110		Moy (River)	34	34M02	SAL	195	7,495,504	7,075,959	2.6	7.9	1.6	7.1	72,868,341	68,593,514
Ballina	(Moy)	110		Brusna (River)	34	34G01	SAL	196	466,431	466,431	0.0	0.0	0.0	0.0	0	0
Ballina	(Easky)	114		Easky (River)	35	35E01	SAL	200	540,375	540,375	1.2	3.6	1.2	3.6	1,235,832	1,235,832
Ballina	(Coastal)	q5		Leaffony (River)	34	34L01	SAL	198	90,486	90,486	0.0	4.3	0.0	4.3	0	0
Ballina (ST only)									**220,066**	**220,066**					**388,858**	**388,858**
Ballina	(Glencullen)	101		Bellananaminnaun (River)	33	33G02	ST	192	61,519	61,519	0.0	16.3	0.0	16.3	0	0
Ballina	(Bellawaddy)	111		Bellawaddy (River)	34	34B05	ST	197	50,521	50,521	0.0	0.0	0.0	0.0	0	0
Ballina	(Finned)	113		Owenykeevan (River)	35	35F01	ST	199	49,622	49,622	7.5	22.4	7.5	22.4	0	0
Ballina	(Belderg)	99		Belderg (River)	33	33B02	ST	190	39,640	39,640	0.0	30.3	0.0	30.3	388,858	388,858
Ballina	(Coastal)	m5		Glenulra (River)	33		ST	191	18,764	18,764					0	0

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FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
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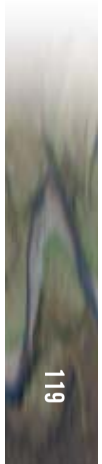
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 28. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Ballina Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Ballina (SAL)																		
Ballina	(Ballinglen)	102	Ballinglen (River)	70,279	22,927	15,562	9,865	7,283	8,088	7,739	3,909	3,118	1,726	12,159	2,269	14,852	26,958	118,576
Ballina	(Cloonaghmore)	104	Cloonaghmore (River)	351,538	76,350	38,738	26,704	19,115	13,010	6,360	4,636	2,451	1,343	5,477	556	8,715	43,287	493,164
Ballina	(Moy)	110	Moy (River)	5,545,853	538,366	263,947	158,434	137,502	78,884	65,192	53,089	31,443	30,360	172,890	42,523	192,170	338,285	6,502,981
Ballina	(Moy)	110	Brusna (River)	263,197	84,639	22,412	29,941	12,518	16,712	8,577	7,397	3,467	3,891	13,680	2,700	18,337	45,845	399,549
Ballina	(Easky)	114	Easky (River)	249,197	79,846	63,119	45,758	29,009	18,841	11,429	8,556	6,873	4,236	23,512	4,723	29,898	68,475	437,279
Ballina	(Coastal)	q5	Leaffony (River)	43,850	22,162	10,839	4,762	2,784	2,004	1,621	457	503	290	1,215	88	1,919	6,866	81,612
Ballina (ST only)																		
Ballina	(Glencullen)	101	Bellananaminnaun (River)	17,450	5,041	4,660	4,198	4,364	5,340	3,362	3,267	1,723	2,388	9,726	1,772	12,064	16,422	31,260
Ballina	(Bellawaddy)	111	Bellawaddy (River)	26,001	7,777	6,344	2,849	2,519	1,532	834	458	504	398	1,305	81	2,126	5,342	42,973
Ballina	(Finned)	113	Owenykeevan (River)	23,554	12,994	5,532	3,297	1,831	811	803	324	250	92	135	14	463	3,768	45,377
Ballina	(Belderg)	99	Belderg (River)	15,723	5,838	4,106	3,108	2,582	1,555	1,849	1,603	869	449	1,957	228	3,046	7,590	28,776
Ballina	(Coastal)	m5	Glenulra (River)	2,300	1,561	1,302	2,019	2,457	2,248	1,955	1,205	607	646	2,465	454	3,264	7,865	7,182



Appendix 29. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m^2) data for the Sligo Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Sligo (all systems)									**4,699,420**	**4,489,889**					**32,558,567**	**20,057,752**
Sligo	Dunneill	115	27,633,906		35				106,618	38,557					0	0
Sligo	Ballysadare	116	646,249,932		35				2,325,875	2,215,260					15,231,482	2,730,667
Sligo	Garvogue	117	395,340,097		35				1,386,679	1,386,679					15,725,963	15,725,963
Sligo	Stream	118	18,285,049		35				61,529	61,529					42,756	42,756
Sligo	Drumcliff	119	62,659,920		35				226,737	195,882					1,146,017	1,146,017
Sligo	Coastal	u5	117,876,801		35				312,625	312,625					122,275	122,275
Sligo	Coastal	v5	45,720,973		35				7,700	7,700					0	0
Sligo	Coastal	w5	21,679,165		35				18,928	18,928					64,985	64,985
Sligo	Coastal	x5	123,011,391		35				237,858	237,858					225,089	225,089
Sligo	Coastal	t5	15,335,284		35				14,871	14,871					0	0
Sligo (SAL)									**4,200,104**	**3,990,574**					**32,002,961**	**19,502,146**
Sligo	(Dunneill)	115		Dunneill (River)	35	35D06	SAL	201	106,618	38,557	0.0	0.0	0.0	0.0	0	0
Sligo	(Ballysadare)	116		Ballysadare (River)	35	35B05	SAL	202	2,301,152	2,190,538	1.6	4.7	1.6	4.9	15,156,100	2,655,285
Sligo	(Garvogue)	117		Garvogue (River)	35	35G01	SAL	203	1,376,884	1,376,884	0.0	0.0	0.0	0.0	15,700,844	15,700,844
Sligo	(Drumcliff)	119		Drumcliff (River)	35	35D04	SAL	205	226,737	195,882	0.0	0.0	0.0	0.0	1,146,017	1,146,017
Sligo	(Coastal)	x5		Carney (River)	35		SAL	206	46,726	46,726					0	0
Sligo	(Coastal)	x5		Grange (River)	35	35G04	SAL	207	141,987	141,987	0.0	0.0	0.0	0.0	0	0
Sligo (ST only)									**61,529**	**61,529**					**42,756**	**42,756**
Sligo	(Stream)	118		Willsborough (Stream)	35	35W01	ST	204	61,529	61,529	0.0	0.0	0.0	0.0	42,756	42,756

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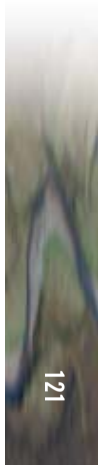
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 30. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Sligo Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Sligo (SAL)																		
Sligo	(Dunneill)	115	Dunneill (River)	9,988	5,977	2,177	5,997	3,180	3,904	1,714	2,454	221	945	2,001	155	3,011	11,252	24,138
Sligo	(Ballysadare)	116	Ballysadare (River)	1,667,410	171,775	89,116	53,172	40,080	33,093	24,424	18,045	10,263	13,097	70,063	19,572	74,910	115,395	1,980,661
Sligo	(Garvogue)	117	Garvogue (River)	944,425	97,889	39,264	39,983	37,868	44,965	24,922	19,289	14,828	17,297	96,156	27,923	100,357	129,029	1,119,575
Sligo	(Drumcliff)	119	Drumcliff (River)	106,802	16,946	9,863	4,363	5,052	4,389	4,061	4,295	2,379	3,540	34,192	15,965	24,435	17,508	137,974
Sligo	(Coastal)	x5	Carney (River)	18,121	5,394	5,250	2,676	1,862	1,099	1,221	2,101	975	769	7,258	1,894	7,109	6,283	31,441
Sligo	(Coastal)	x5	Grange (River)	42,450	20,027	8,735	14,338	8,952	7,169	4,613	5,082	3,147	3,497	23,976	7,679	23,284	25,474	85,550
Sligo (ST only)																		
Sligo	(Stream)	118	Willsborough (Stream)	12,111	3,596	9,500	5,301	4,271	7,761	2,462	1,902	1,801	2,332	10,494	2,694	11,932	16,395	30,508



Appendix 31. Fluvial & lacustrine salmon (and sea trout) wetted area habitat quantity (m²) data for the Ballyshannon Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Ballyshannon (all systems)									**11,332,044**	**4,410,530**					**94,621,777**	**30,827,156**
Ballyshannon	Duff	120	87,938,072		35				461,575	461,575					2,446	2,446
Ballyshannon	Drowes	121	161,759,420		35				615,415	566,025					22,247,679	22,247,679
Ballyshannon	Bradoge	122	17,389,893		35				55,204	55,204					0	0
Ballyshannon	Erne	123	2,481,659,741		36				6,993,162	442,310					62,887,338	2,333,404
Ballyshannon	Erne (nss)								6,559,897	0					60,558,212	0
Ballyshannon	Glen	52	123,193,688		37				447,760	445,754					1,088,717	525,765
Ballyshannon	Glenaddragh	53	39,953,529		37				145,033	145,033					0	0
Ballyshannon	Bungosteen	54	42,889,240		37				190,577	170,345					270,461	34,504
Ballyshannon	Oily	55	47,671,728		37				210,618	210,618					376,826	376,826
Ballyshannon	Eany Water	57	119,257,651		37				691,343	691,343					267,414	267,414
Ballyshannon	Eask	58	112,534,739		37				496,658	431,848					4,305,327	4,006,260
Ballyshannon	Stream	59	41,660,825		37				182,382	182,382					147,627	147,627
Ballyshannon	Ballintra	60	95,859,501		37				411,081	176,857					2,301,371	158,660
Ballyshannon	Coastal	a6_35	7,876,720		36				7,009	7,009					0	0
Ballyshannon	Coastal	a6_37	24,572,123		37				35,496	35,496					696,386	696,386
Ballyshannon	Coastal	c6	8,990,449		37				16,264	16,264					27,173	27,173
Ballyshannon	Coastal	d6	44,623,221		37				139,204	139,204					0	0
Ballyshannon	Coastal	e6	43,793,391		37				147,313	147,313					0	0
Ballyshannon	Coastal	f6	4,234,727		37				872	872					0	0
Ballyshannon	Coastal	g6	29,738,482		37				59,270	59,270					3,012	3,012
Ballyshannon	Coastal	h6_37	24,851,148		37				23,067	23,067					0	0
Ballyshannon	Coastal	y5	4,445,755		35				2,741	2,741					0	0
Ballyshannon	Coastal	z5	8,751,081		36				0	0					0	0
Ballyshannon (SAL)									**10,178,849**	**3,361,359**					**31,955,156**	**28,714,469**
Ballyshannon	(Duff)	120		Duff (River)	35	35D05	SAL	208	461,575	461,575	0.0	0.0	0.0	0.0	2,446	2,446
Ballyshannon	(Drowes)	121		Drowes (River)	35	35D03	SAL	209	611,703	562,314	0.0	0.0	0.0	0.0	22,242,496	22,242,496
Ballyshannon	(Erne)	123		Abbey (River)	36		SAL	211	107,691	107,691					1,196,249	1,196,249
Ballyshannon	(Erne)	122		Erne (River)	36	36E01	SAL	210	6,457,264	10,436	18.3	32.49	0.0	0.0	0	0
Ballyshannon	(Glen)	52		Glen (River)	37	37G01	SAL	219	359,004	356,998	2.7	21.0	2.7	21.1	629,681	66,729
Ballyshannon	(Glen)	52		Owenwee (River)	37	37O03	SAL	220	69,079	69,079	0.0	0.0	0.0	0.0	453,143	453,143

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Ballyshannon	(Bungosteen)	54		Bungosteen (River)	37	37S02	SAL	217	175,143	154,911	0.0	3.1	0.0	3.5	239,144	3,187
Ballyshannon	(Oily)	55		Oily (River)	37	37O01	SAL	216	210,618	210,618	0.2	0.2	0.2	0.2	376,826	376,826
Ballyshannon	(Eany Water)	57		Eany (Water)	37	37E03	SAL	215	656,530	656,530	0.0	0.0	0.0	0.0	102,600	102,600
Ballyshannon	(Eask)	58		Eske (River)	37	37E05	SAL	214	496,658	431,848	0.0	1.4	0.0	1.6	4,263,573	3,964,506
Ballyshannon	(Stream)	59		Laghy (Stream)	37	37L02	SAL	213	181,228	181,228	0.0	0.0	0.0	0.0	147,627	147,627
Ballyshannon	(Ballintra)	60		Ballintra (River)	37	37B02	SAL	212	392,356	158,131	0.0	0.0	0.0	0.0	2,301,371	158,660
Ballyshannon (ST only)									**145,033**	**145,033**					**0**	**0**
Ballyshannon	(Glenaddragh)	53		Glenaddragh (River)	37	37G02	ST	218	145,033	145,033	0.0	0.0	0.0	0.0	0	0

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% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
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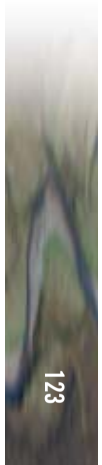

Appendix 32. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Ballyshannon Fisheries District classified using Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Ballyshannon (SAL)																		
Ballyshannon	(Duff)	120	Duff (River)	238,009	34,029	29,156	29,059	22,868	16,689	11,022	8,202	6,960	5,530	60,051	26,816	45,725	60,656	328,378
Ballyshannon	(Drowes)	121	Drowes (River)	289,167	44,604	39,937	27,664	21,190	15,990	13,069	15,082	10,673	9,808	75,131	31,013	64,599	68,121	398,582
Ballyshannon	(Erne)	123	Abbey (River)	59,280	13,146	15,502	4,616	4,009	3,851	750	944	456	650	4,487	1,227	4,366	9,554	92,544
Ballyshannon	(Erne)	122	Erne (River)	7,560	118	197	1,005	665	267	0	51	191	0	383	297	276	982	8,880
Ballyshannon	(Glen)	52	Glen (River)	104,783	51,454	40,506	30,080	25,275	16,894	13,593	11,276	6,846	6,047	50,242	11,533	51,727	67,232	226,506
Ballyshannon	(Glen)	52	Owenwee (River)	15,712	6,546	6,215	5,269	5,467	4,074	4,734	4,374	3,293	1,962	11,432	2,021	14,683	18,632	33,743
Ballyshannon	(Bungosteen)	54	Bungosteen (River)	39,737	25,312	17,121	17,138	9,877	10,351	6,896	6,587	2,836	2,577	16,477	3,181	18,709	36,001	97,020
Ballyshannon	(Oily)	55	Oily (River)	100,780	28,874	18,626	15,071	13,772	7,317	5,359	4,538	2,414	1,693	12,176	2,812	13,471	31,243	163,092
Ballyshannon	(Eany Water)	57	Eany (Water)	273,124	65,834	53,270	42,115	35,852	29,797	24,682	21,671	16,202	12,373	81,609	19,757	91,016	111,857	433,899
Ballyshannon	(Eask)	58	Eske (River)	198,716	37,416	31,822	23,015	23,809	21,162	17,095	12,767	8,424	6,430	51,193	15,225	51,334	76,859	288,430
Ballyshannon	(Stream)	59	Laghy (Stream)	54,106	20,219	20,455	18,273	14,545	10,865	9,138	7,696	5,794	3,784	16,354	3,258	22,686	42,243	113,040
Ballyshannon	(Ballintra)	60	Ballintra (River)	88,079	10,945	26,640	8,262	5,766	3,309	2,736	1,924	1,122	1,678	7,669	1,785	8,684	13,736	133,927
Ballyshannon (ST only)																		
Ballyshannon	(Glenaddragh)	53	Glenaddragh (River)	23,764	20,527	14,900	14,193	12,370	10,392	9,080	5,865	4,167	3,159	26,614	8,043	25,952	37,725	73,313

Appendix 33. Fluvial & lacustrine salmon (and sea trout) habitat quantity (m^2) data for the Letterkenny Fisheries District

DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Letterkenny (all systems)									**7,045,066**	**6,751,361**					**36,657,409**	**35,599,148**
Letterkenny	Keenagh	1	28,501,764		40				71,515	71,515					0	0
Letterkenny	Glenvar	10	13,043,351		39				28,188	28,188					0	0
Letterkenny	Owencronahulla	19	18,282,425		38				57,705	57,705					16,065	16,065
Letterkenny	Carrownamaddy	2	20,194,126		38				65,102	65,102					0	0
Letterkenny	Owenawillin	20	7,491,139		38				16,986	16,986					329,873	329,873
Letterkenny	Glenna	21	25,239,674		38				72,633	72,633					36,282	36,282
Letterkenny	Gweedore	22	59,210,826		38				120,034	112,864					1,500,716	1,500,716
Letterkenny	Clady	23	87,776,982		38				195,006	179,023					3,665,464	3,352,520
Letterkenny	Tullaghobegly	24	31,572,343		38				78,626	78,626					1,331,457	1,331,457
Letterkenny	Faymore	25	19,157,035		38				57,865	57,865					0	0
Letterkenny	Duntally	26	11,087,445		38				26,244	26,244					57,889	57,889
Letterkenny	Lackagh	27	126,426,121		38				436,635	376,304					4,454,288	4,301,184
Letterkenny	Big Burn	28	13,783,086		38				34,725	34,725					54,479	54,479
Letterkenny	Bunlin	29	13,131,644		38				29,431	29,431					0	0
Letterkenny	Ray	3	53,136,949		38				168,605	146,332					208,298	208,298
Letterkenny	Loughkeel	30	5,733,079		38				19,858	19,858					609,934	609,934
Letterkenny	Leannan	31	275,705,921		39				1,191,746	1,191,746					4,857,374	4,857,374
Letterkenny	Drumhallagh	32	15,010,526		39				53,740	53,740					0	0
Letterkenny	Glenalla	33	19,954,147		39				65,693	65,693					42,308	42,308
Letterkenny	Mill	34	43,942,236		39				123,184	94,908					0	0
Letterkenny	Burnfoot	35	22,182,166		39				36,084	36,084					0	0
Letterkenny	Clonmany	4	55,986,477		40				151,703	151,703					0	0
Letterkenny	Owenamarve	47	25,276,758		38				56,359	56,359					1,257,850	1,257,850
Letterkenny	Gweebarra	48	148,086,030		38				349,310	309,838					1,154,516	1,046,691
Letterkenny	Abberachrin	49	22,532,625		38				53,758	53,758					1,228,859	1,228,859
Letterkenny	Straid	5	21,290,819		40				78,092	67,152					0	0
Letterkenny	Owenea	50	126,413,203		38				631,447	617,557					1,661,413	1,267,137
Letterkenny	Swilly	51	272,571,067		39				783,591	769,563					2,239,964	2,239,964
Letterkenny	Owentocker	56	43,414,892		38				204,263	182,949					154,005	63,893
Letterkenny	Donagh	6	35,495,391		40				141,449	141,449					0	0
Letterkenny	Loughinn	7	35,145,857		40				138,183	132,507					181,149	181,149

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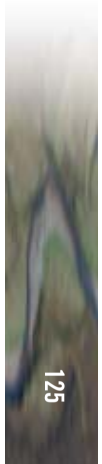

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Letterkenny	Owenerk	8	21,404,999		39				51,945	51,945					0	0
Letterkenny	Crana	9	101,312,135		39				441,540	391,040					161,244	161,244
Letterkenny	Coastal	a7	20,434,049		39				21,646	21,646					0	0
Letterkenny	Coastal	b7_39	15,137,826		39				3,985	3,985					0	0
Letterkenny	Coastal	b7_40	7,560,300		40				4,518	4,518					0	0
Letterkenny	Coastal	c7	20,385,336		40				11,304	11,304					0	0
Letterkenny	Coastal	d7	8,428,250		40				5,406	5,406					0	0
Letterkenny	Coastal	d_39	67,106,706		39				62,304	62,304					1,628,683	1,628,683
Letterkenny	Coastal	h6_38	111,746,197		38				244,710	244,710					283,923	283,923
Letterkenny	Coastal	i6	11,242,462		38				30,207	30,207					65,787	65,787
Letterkenny	Coastal	j6	24,161,344		38				12,158	12,158					604,412	604,412
Letterkenny	Coastal	k6	28,202,277		38				23,051	23,051					372,287	372,287
Letterkenny	Coastal	l6	139,453,255		38				149,666	149,666					5,507,878	5,507,878
Letterkenny	Coastal	m6	13,566,649		38				11,449	11,449					0	0
Letterkenny	Coastal	o6	4,290,870		38				192	192					0	0
Letterkenny	Coastal	p6	44,290,192		38				41,273	41,273					1,487,711	1,487,711
Letterkenny	Coastal	q6	5,380,158		38				68	68					0	0
Letterkenny	Coastal	r6	3,970,538		38				3,676	3,676					6,229	6,229
Letterkenny	Coastal	s6	61,878,389		38				92,528	92,528					101,828	101,828
Letterkenny	Coastal	t6	5,498,006		38				2,817	2,817					0	0
Letterkenny	Coastal	u6_38	86,607,357		38				94,500	94,500					1,308,158	1,308,158
Letterkenny	Coastal	u6_39	33,465,323		39				56,434	56,434					0	0
Letterkenny	Coastal	v6	4,915,105		39				9,023	9,023					0	0
Letterkenny	Coastal	w6	16,118,503		39				10,780	10,780					43,546	43,546
Letterkenny	Coastal	x6	1,781,152		39				0	0					0	0
Letterkenny	Coastal	y6	1,583,306		39				0	0					0	0
Letterkenny	Coastal	a nth	4,280,307		40				2,831	2,831					0	0
Letterkenny	Coastal	a	31,098,795		40				44,607	44,607					0	0
Letterkenny	Coastal	n6	52,479,933		38				74,688	70,836					43,540	43,540
Letterkenny (SAL)									**5,631,468**	**5,337,762**					**20,450,397**	**19,392,136**
Letterkenny	(Owencronahulla)	19		Owencronahulla	38	38009	SAL	230	57,607	57,607	0.0	0.5	0.0	0.5	16,065	16,065
Letterkenny	(Carrownamaddy)	2		Derryart (River)	38	38C02	SAL	237	65,102	65,102	0.0	0.0	0.0	0.0	0	0

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Letterkenny	(Glenna)	21		Glenna (River)	38	38G01	SAL	234	72,633	72,633	0.0	0.0	0.0	0.0	36,282	36,282
Letterkenny	(Gweedore)	22		Gweedore (River)	38	38G03	SAL	228	118,319	111,149	0.0	0.0	0.0	0.0	1,500,716	1,500,716
Letterkenny	(Clady)	23		Clady (River)	38	38C04	SAL	229	195,006	179,023	0.0	0.0	0.0	0.0	3,665,464	3,352,520
Letterkenny	(Tullaghobegly)	24		Tullaghobegly (River)	38	38T01	SAL	235	78,626	78,626	31.7	54.3	31.7	54.3	1,331,457	1,331,457
Letterkenny	(Faymore)	25		Faymore (River)	38	38F01	SAL	238	57,865	57,865	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Lackagh)	27		Lackagh (River)	38	38L01	SAL	240	436,109	375,778	0.0	0.0	0.0	0.0	4,454,288	4,301,184
Letterkenny	(Ray)	3		Ray (River)	38	38R01	SAL	236	168,605	146,332	1.5	1.5	0.1	0.1	208,298	208,298
Letterkenny	(Leannan)	31		Leannan (River)	39	39L01	SAL	248	1,167,125	1,167,125	1.0	12.7	1.0	12.7	4,826,205	4,826,205
Letterkenny	(Drumhallagh)	32		Drumhallagh (River)	39	39D01	SAL	246	53,740	53,740	0.0	2.3	0.0	2.3	0	0
Letterkenny	(Mill)	34		Mill (River)	39	39M02	SAL	252	123,296	95,019	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Clonmany)	4		Clonmany (River)	40	40C01	SAL	256	151,703	151,703	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Owenamarve)	47		Owennamarve (River)	38	38O05	SAL	226	56,359	56,359	0.0	0.0	0.0	0.0	1,257,850	1,257,850
Letterkenny	(Gweebarra)	48		Gweebarra (River)	38	38G02	SAL	225	287,952	248,480	0.0	0.0	0.0	0.0	758,254	650,429
Letterkenny	(Straid)	5		Straid (River)	40	40S01	SAL	257	78,092	67,152	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Owenea)	50		Owenea (River)	38	38O04	SAL	223	630,856	616,966	0.0	0.0	0.0	0.0	1,661,413	1,267,137
Letterkenny	(Swilly)	51		Isle (Burn)	39	39L05	SAL	250	183,078	183,078	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Swilly)	51		Swilly (River)	39	39S02	SAL	249	394,241	380,213	0.0	0.0	0.0	0.0	237,707	237,707
Letterkenny	(Owentocker)	56		Owentocker (River)	38	38O06	SAL	222	204,263	182,949	0.6	0.6	0.7	0.7	154,005	63,893
Letterkenny	(Donagh)	6		Donagh (River)	40	40D01	SAL	258	141,449	141,449	22.8	22.8	22.8	22.8	0	0
Letterkenny	(Loughinn)	7		Glennagannon (River)	40	40G01	SAL	259	126,111	120,435	0.0	0.0	0.0	0.0	181,149	181,149
Letterkenny	(Owenerk)	8		Owenerk (River)	39	39O02	SAL	255	51,945	51,945	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Crana)	9		Crana (River)	39	39C02	SAL	253	433,536	383,036	0.5	0.8	0.6	0.8	161,244	161,244
Letterkenny	(Coastal)	d_39		Burnfoot	39	39B02	SAL	251	75,179	75,179	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Coastal)	h6_38		Bracky (River)	38	38B02	SAL	221	109,650	109,650	8.3	8.3	8.3	8.3	0	0
Letterkenny	(Coastal)	a nth		Culoort (River)	40	40K01	SAL	261	71,714	71,714	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Coastal)	n6		Glen (River)	38	38G05	SAL	231	41,307	37,455	0.0	0.0	0.0	0.0	0	0
Letterkenny (ST only)									**407,630**	**407,630**					**4,162,234**	**4,162,234**
Letterkenny	(Glenvar)	10		Glenvar (River)	39	39G04	ST	245	28,188	28,188	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Owenawillin)	20		Owenawillin	38	38O10	ST	232	16,986	16,986	0.0	11.3	0.0	11.3	329,873	329,873
Letterkenny	(Duntally)	26		Duntally (River)	38	38D03	ST	239	26,244	26,244	0.0	0.0	0.0	0.0	57,889	57,889
Letterkenny	(Big Burn)	28		Big (Burn)	38	38B03	ST	241	34,725	34,725	0.0	0.0	0.0	0.0	54,479	54,479
Letterkenny	(Bunlin)	29		Bunlin (River)	38	38B04	ST	242	24,842	24,842	0.0	0.0	0.0	0.0	0	0

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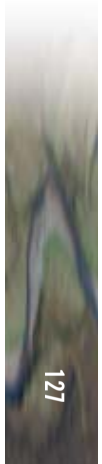

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DISTRICT	CATCHMENT	OS CAT NO	CAT AREA	Fishery System	EPA HA	EPA RV CODE	FB TYPE	FB CODE	FLUV TOT	FLUV ACCES	% FLUV Q3	% FLUV Q34	% ACC FLUV Q3	% ACC FLUV Q34	LAC TOT	LAC ACCES
Letterkenny	(Loughkeel)	30		Loughkeel (Burn)	38	38L03	ST	243	19,858	19,858	3.2	3.2	3.2	3.2	609,934	609,934
Letterkenny	(Glenalla)	33		Glenalla (River)	39	39G03	ST	247	65,693	65,693	0.0	0.0	0.0	0.0	73,477	73,477
Letterkenny	(Abberachrin)	49		Duvoge (River)	38	38D05	ST	224	49,970	49,970	0.0	0.0	0.0	0.0	1,161,552	1,161,552
Letterkenny	(Coastal)	a7		Aghaweel (River)	39	39A01	ST	254	16,786	16,786	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Coastal)	l6		Dunglow (River)	38	38D02	ST	227	57,569	57,569	2.0	2.0	2.0	2.0	1,875,030	1,875,030
Letterkenny	(Coastal)	u6_38		Burnside (River)	38	38B05	ST	244	33,671	33,671	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Coastal)	a		Ballyboe (River)	40	40B03	ST	260	16,769	16,769	0.0	0.0	0.0	0.0	0	0
Letterkenny	(Coastal)	n6		Owentully	38		ST	233	16,329	16,329					0	0

DISTRICT = Fisheries District
CATCHMENT = OS catchment name
OS CAT NO = OS river catchment number
CAT AREA = Catchment area (m^2)
Fishery System = OS River Name (or local name where OS name absent) of fishery
EPA HA = EPA Hydrometric area

EPA RVC = EPA River Code
FB Type = Fisheries Board System Classification
FB Code = Fisheries Board River Code
FLUV TOT = Total Fluvial Habitat (m^2)
FLUV ACCES = Total Fluvial Habitat (m^2) Accessible to Salmon
% FLUV Q3 = % of fluvial habitat with EPA Q3 (moderately polluted) rating or lower

% FLUV Q3-4 = % of fluvial habitat with EPA Q3-4 (slightly polluted waters) rating or lower
% ACC FLUV Q3 = % of fluvial habitat accessible to salmon with EPA Q3 (moderately polluted) rating or lower
% ACC FLUV Q34 = % of fluvial habitat accessible to salmon with EPA Q3-4 (slightly polluted waters) rating or lower
LAC TOT = Total Lacustrine Habitat (m^2)
LAC ACCES = Total Lacustrine Habitat (m^2) Accessible to Salmon

Appendix 34. Fluvial salmon (and sea trout) accessible wetted area (m^2) habitat quality rating data for the Letterkenny Fisheries District as expressed in Amiro (1993) and Rosgen (1996) gradient classification systems

DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02 ←	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2 →	ROSGEN3	ROSGEN4 low gradient
Letterkenny (SAL)																		
Letterkenny	(Owencronahulla)	19	Owencronahulla	8,383	5,239	6,062	8,592	7,307	5,109	3,938	2,617	1,431	1,278	7,654	1,461	8,901	23,693	23,552
Letterkenny	(Carrownamaddy)	2	Derryart (River)	21,619	11,954	4,285	6,356	4,034	3,978	3,075	1,681	1,268	1,324	5,527	853	7,266	12,904	44,079
Letterkenny	(Glenna)	21	Glenna (River)	18,396	16,771	5,319	8,538	3,568	3,459	2,315	2,164	1,768	1,469	8,866	1,663	10,441	11,549	48,981
Letterkenny	(Gweedore)	22	Gweedore (River)	55,253	9,486	7,696	4,244	4,569	3,765	4,385	4,678	2,581	2,290	12,202	3,274	13,853	17,819	76,203
Letterkenny	(Clady)	23	Clady (River)	62,473	20,518	12,431	8,741	9,539	9,720	8,038	7,556	4,598	3,086	32,323	10,818	29,189	35,437	103,579
Letterkenny	(Tullaghobegly)	24	Tullaghobegly (River)	20,470	12,094	6,998	5,799	7,409	4,281	5,649	3,660	1,423	2,202	8,641	2,413	9,853	20,998	45,361
Letterkenny	(Faymore)	25	Faymore (River)	16,293	6,601	6,646	5,654	3,980	2,505	4,317	3,097	1,466	1,157	6,149	1,164	7,608	13,899	35,195
Letterkenny	(Lackagh)	27	Lackagh (River)	204,245	24,958	35,594	13,882	14,865	10,575	13,368	7,862	4,909	6,158	39,360	13,474	37,006	48,988	276,310
Letterkenny	(Ray)	3	Ray (River)	44,587	16,860	18,406	13,764	11,530	9,538	6,836	5,738	3,026	2,367	13,680	3,504	17,182	32,028	93,617
Letterkenny	(Leannan)	31	Leannan (River)	640,653	139,840	85,232	54,349	43,798	32,910	29,382	21,956	17,373	13,792	87,840	19,563	99,940	127,975	919,647
Letterkenny	(Drumhallagh)	32	Drumhallagh (River)	13,270	5,607	6,977	5,307	4,678	3,846	2,996	2,858	1,367	886	5,949	1,197	7,005	14,708	30,831
Letterkenny	(Mill)	34	Mill (River)	31,014	16,357	9,192	7,745	5,258	2,391	3,336	2,645	2,334	1,203	13,545	3,245	13,874	13,592	64,308
Letterkenny	(Clonmany)	4	Clonmany (River)	60,365	22,746	11,196	10,832	8,141	10,494	3,685	4,151	2,625	2,208	15,261	4,587	15,506	26,476	105,134
Letterkenny	(Owenamarve)	47	Owennamarve (River)	28,838	3,737	8,650	3,882	2,030	1,092	1,116	1,603	1,203	645	3,565	1,004	4,409	6,606	44,340
Letterkenny	(Gweebarra)	48	Gweebarra (River)	127,002	29,419	18,584	12,283	7,940	7,749	5,906	5,812	5,570	2,563	25,651	10,459	24,533	28,675	184,813
Letterkenny	(Straid)	5	Straid (River)	13,005	9,112	4,357	10,887	6,522	3,926	5,406	3,141	1,753	1,856	7,187	1,425	9,371	21,213	35,144
Letterkenny	(Owenea)	50	Owenea (River)	265,707	110,423	48,566	34,668	30,735	20,892	18,549	12,761	8,630	9,173	56,861	15,186	59,517	85,840	456,423
Letterkenny	(Swilly)	51	Isle (Burn)	78,928	25,548	13,118	13,934	10,363	8,994	6,345	4,754	3,802	3,282	14,010	1,338	20,057	30,155	131,527
Letterkenny	(Swilly)	51	Swilly (River)	162,460	46,635	22,847	18,428	18,847	11,858	13,424	11,731	9,898	6,612	57,473	9,176	64,881	55,786	250,370
Letterkenny	(Owentocker)	56	Owentocker (River)	51,047	23,584	23,306	23,296	14,751	13,220	8,136	5,382	2,696	3,614	13,917	2,190	18,037	41,618	121,104
Letterkenny	(Donagh)	6	Donagh (River)	51,314	13,660	22,402	9,262	9,679	6,852	4,414	6,002	3,563	2,677	11,623	1,965	15,898	26,948	96,637
Letterkenny	(Loughinn)	7	Glennagannon (River)	22,857	27,870	10,890	10,329	18,919	6,170	4,848	2,872	1,954	2,461	11,266	1,372	14,309	33,343	71,411
Letterkenny	(Owenerk)	8	Owenerk (River)	11,091	5,015	3,816	3,853	5,044	4,072	3,160	2,330	1,885	1,793	9,887	1,027	12,621	14,522	23,775
Letterkenny	(Crana)	9	Crana (River)	157,297	59,989	34,080	21,157	19,194	12,320	15,740	11,376	6,326	5,712	39,847	6,088	46,926	58,340	271,683
Letterkenny	(Coastal)	d_39	Burnfoot	41,515	6,355	4,516	3,607	2,107	7,143	1,716	1,108	789	1,588	4,733	1,267	5,913	12,004	55,994
Letterkenny	(Coastal)	h6_38	Bracky (River)	13,702	17,357	8,437	12,123	9,152	9,352	3,046	3,400	2,357	2,226	28,498	10,471	22,718	24,842	51,619
Letterkenny	(Coastal)	a nth	Culoort (River)	32,550	13,278	4,543	5,026	2,471	3,411	2,142	997	933	886	5,476	1,026	6,270	9,341	55,077
Letterkenny	(Coastal)	n6	Glen (River)	5,677	4,846	9,174	4,232	5,148	2,732	1,203	656	622	442	2,724	374	3,413	9,738	23,929
Letterkenny (ST only)																		
Letterkenny	(Glenvar)	10	Glenvar (River)	3,814	2,262	2,428	4,244	3,273	2,617	2,212	1,645	694	576	4,424	420	5,274	10,356	12,139

continued

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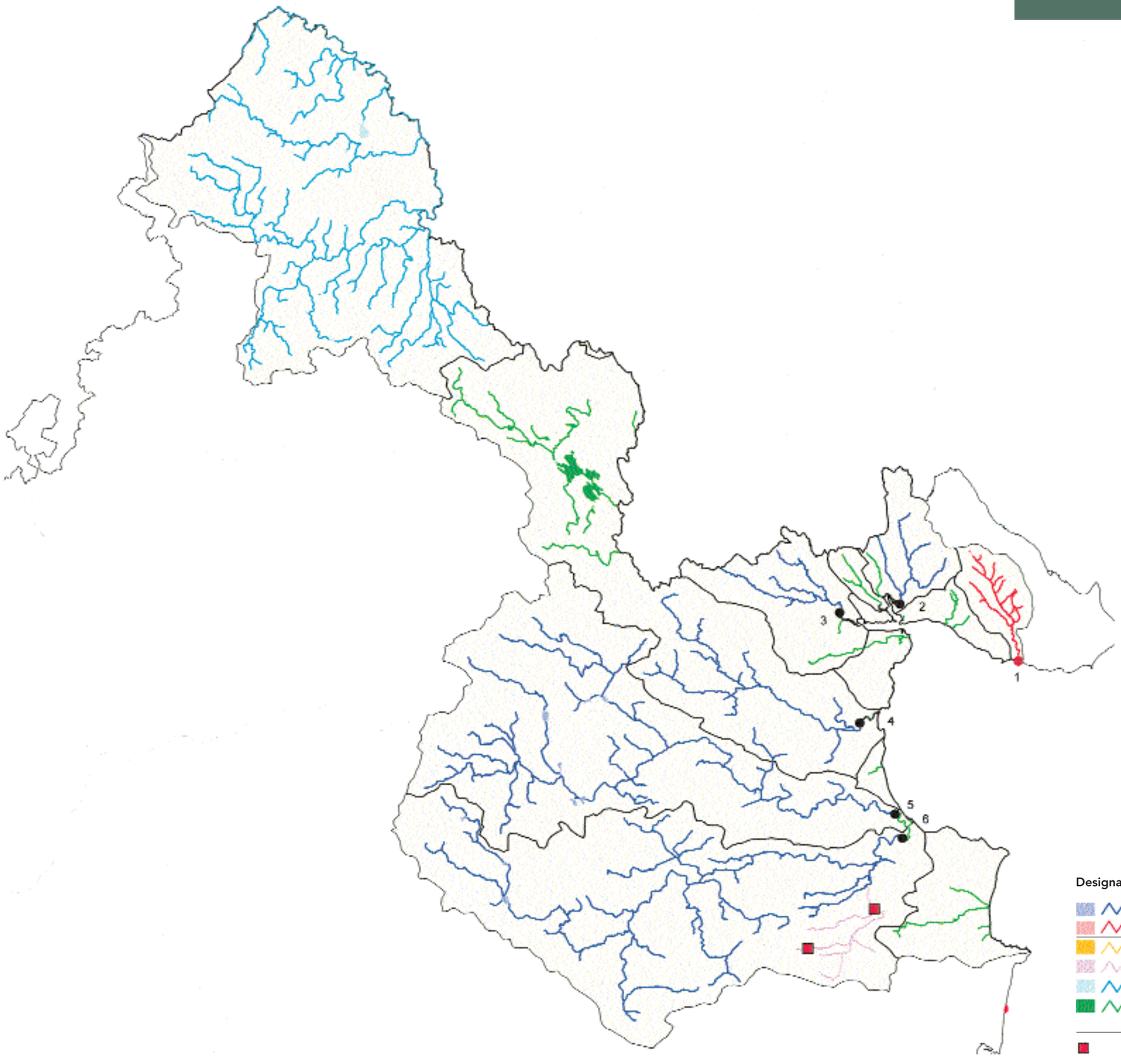
DISTRICT	CATCHMENT	OS CATNO	Fishery System	AMIR01 low gradient	AMIR02	AMIR03	AMIR04	AMIR05	AMIR06	AMIR07	AMIR08	AMIR09	AMIR010	AMIR011 high gradient	ROSGEN1 high gradient	ROSGEN2	ROSGEN3	ROSGEN4 low gradient
Letterkenny	(Owenawillin)	20	Owenawillin	4,154	1,138	907	2,883	1,364	2,064	1,182	654	463	313	1,864	258	2,382	5,264	9,082
Letterkenny	(Duntally)	26	Duntally (River)	17,430	2,129	1,234	1,257	977	612	610	374	135	183	1,302	289	1,332	2,574	22,050
Letterkenny	(Big Burn)	28	Big (Burn)	4,414	4,853	4,697	3,680	5,193	3,417	2,699	1,138	1,282	368	2,983	249	4,384	12,447	17,645
Letterkenny	(Bunlin)	29	Bunlin (River)	2,174	2,067	2,411	1,990	6,509	1,199	1,133	717	467	1,030	5,143	969	5,671	9,559	8,642
Letterkenny	(Loughkeel)	30	Loughkeel (Burn)	3,537	1,425	2,265	1,493	4,981	1,250	373	911	398	545	2,680	143	3,481	7,609	8,625
Letterkenny	(Glenalla)	33	Glenalla (River)	6,663	12,031	7,234	4,800	4,450	8,253	5,884	3,699	1,731	1,493	9,454	1,920	10,856	22,188	30,728
Letterkenny	(Abberachrin)	49	Duvoge (River)	27,964	4,456	11,373	1,450	1,429	460	759	645	152	156	1,127	437	998	3,293	45,243
Letterkenny	(Coastal)	a7	Aghaweel (River)	3,623	1,733	1,197	1,132	841	1,368	778	2,088	455	353	3,217	615	3,410	5,075	7,685
Letterkenny	(Coastal)	l6	Dunglow (River)	28,300	3,903	5,741	2,502	3,333	1,666	3,190	2,209	567	895	5,262	1,122	5,690	10,309	40,447
Letterkenny	(Coastal)	u6_38	Burnside (River)	4,658	4,240	3,756	3,203	2,616	2,084	2,091	1,721	1,472	1,513	6,317	1,374	7,996	8,443	15,857
Letterkenny	(Coastal)	a	Ballyboe (River)	12,649	1,594	661	217	147	216	260	159	58	97	709	64	801	783	15,122
Letterkenny	(Coastal)	n6	Owentully	2,700	1,691	1,357	1,160	1,095	2,066	556	2,397	267	163	2,877	861	4,456	4,105	6,907

Appendix 35

Fisheries District Maps (1-17)

Map 1 Dundalk Fisheries District

Fishery Code	Fishery Type	River
1	ST	Castletown (River)
2	SAL	Flurry (River)
3	SAL	Castletown (River)
4	SAL	Fane (River)
5	SAL	Glyde (River)
6	SAL	Dee (River)

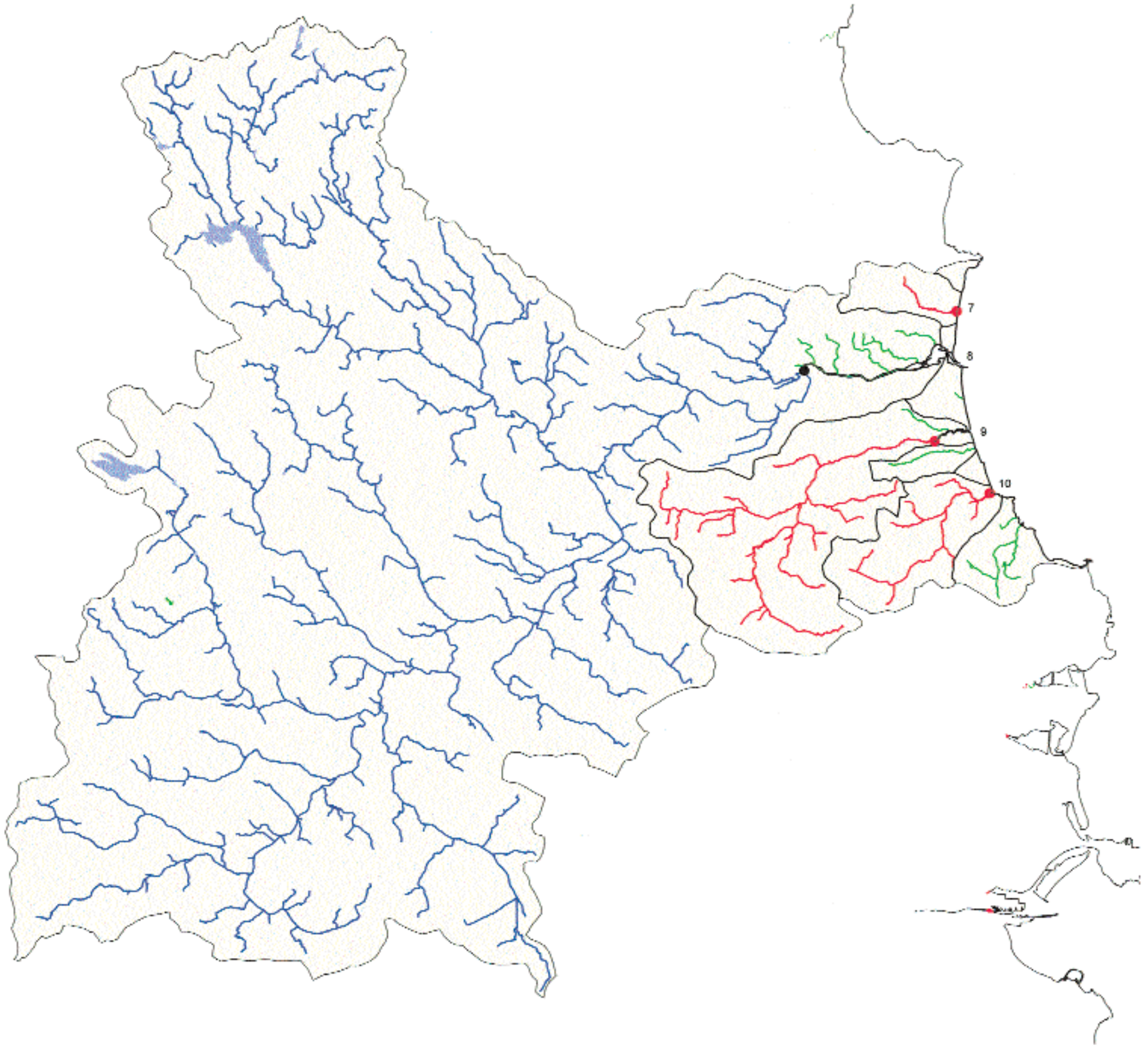


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 2 Drogheda Fisheries District

Fishery Code	Fishery Type	River
7	ST	Termonfeckin
8	SAL	Boyne (River)
9	ST	Nanny (River)
10	ST	Delvin (River)

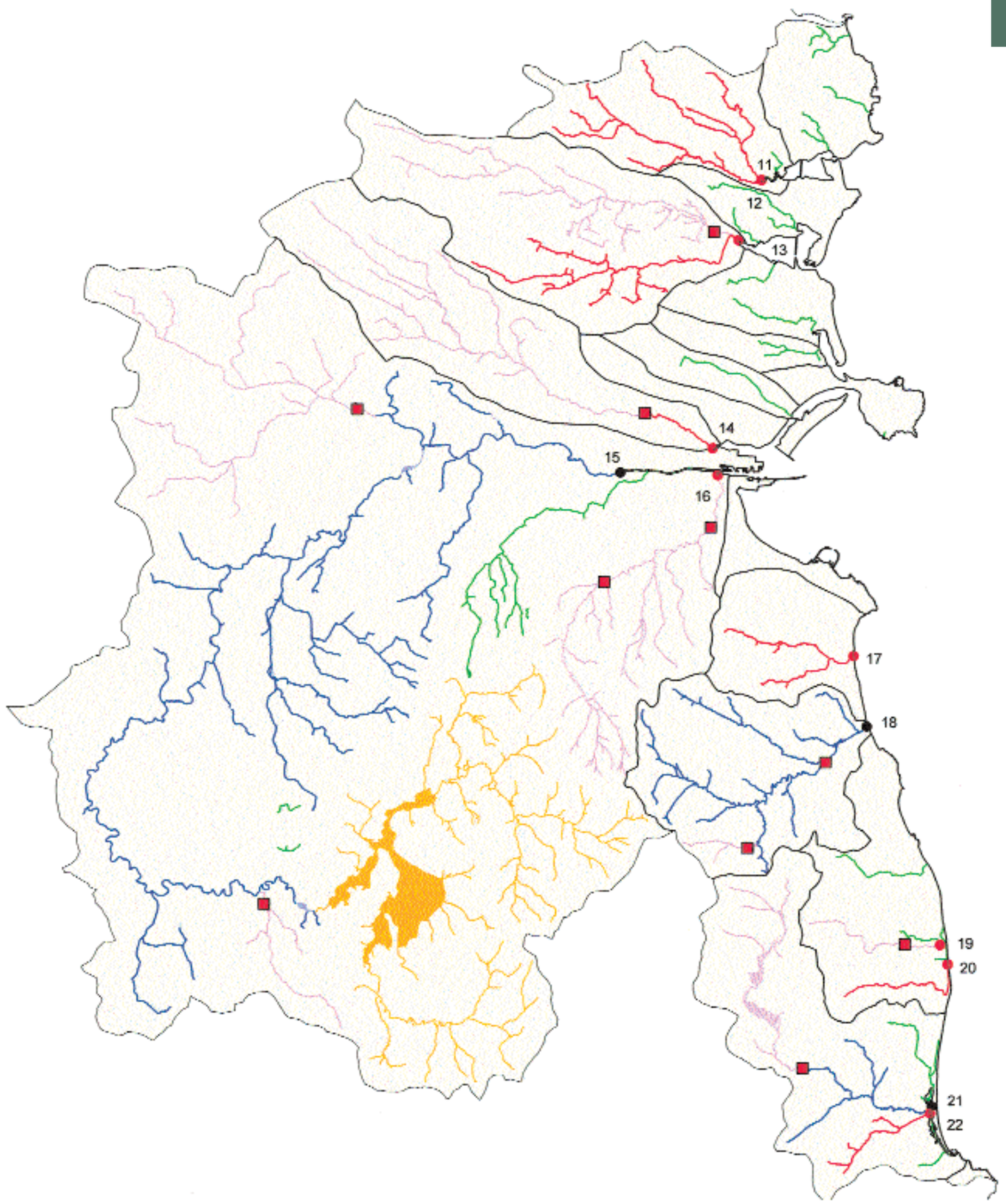


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 3 Dublin Fisheries District

Fishery Code	Fishery Type	River
11	ST	Ballough (Stream)
12	ST	Ballyboghil
13	ST	Broad Meadow (River)
14	ST	Tolka (River)
15	SAL	Liffey (River)
16	ST	Dodder (River)
17	ST	Shanganagh
18	SAL	Dargle (River)
19	ST	Newtownmountkennedy
20	ST	Newcastle [Wicklow]
21	SAL	Vartry (River)

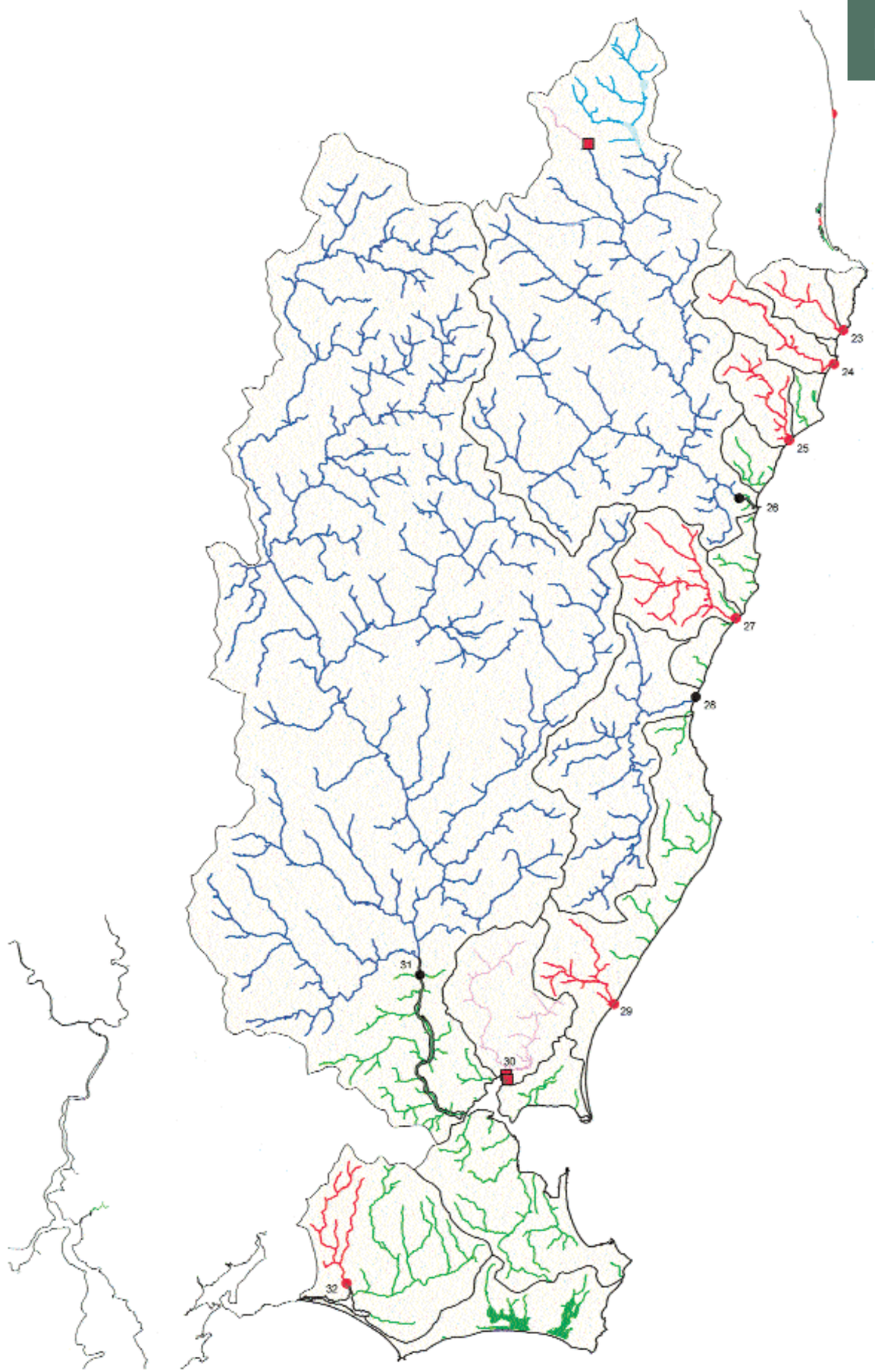


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 4 Wexford Fisheries District

Fishery Code	Fishery Type	River
23	ST	Three Mile Water
24	ST	Potter's (River)
25	ST	Redcross (River)
26	SAL	Avoca (River)
27	ST	Inch (River)
28	SAL	Owenavorragh (River)
29	ST	Blackwater (River)
30	ST	Sow (River)
31	SAL	Slaney (River)
32	ST	Duncormick

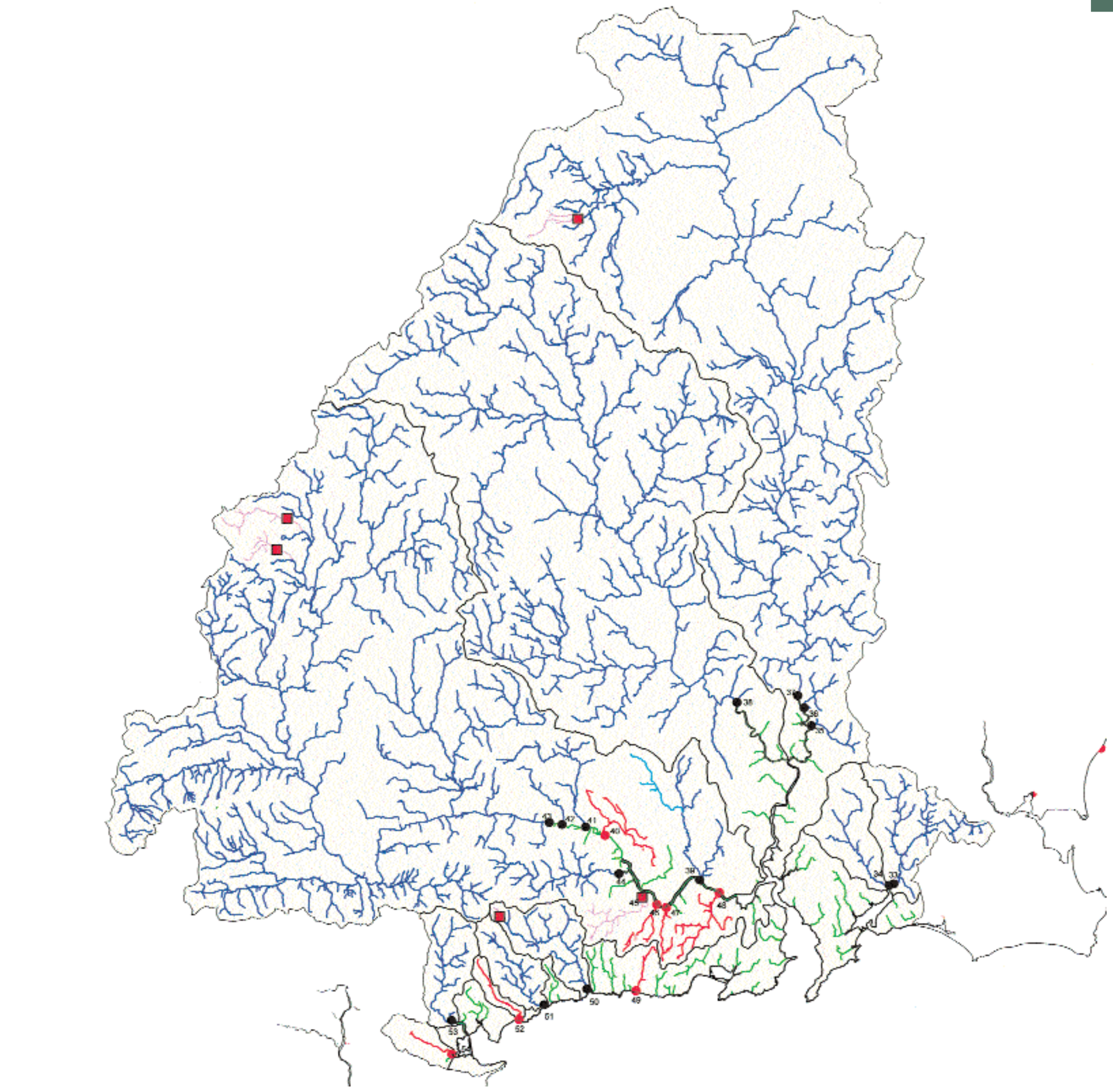


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 5 Waterford Fisheries District

Fishery Code	Fishery Type	River
33	SAL	Corock (River)
34	SAL	Owenduff (River)
35	SAL	Pollmounty (River)
36	SAL	Aughnavaud (River)
37	SAL	Barrow (River)
38	SAL	Nore (River)
39	SAL	Black Water
40	ST	Pil (River)
41	SAL	Lingaun (River)
42	SAL	Glen (River)
43	SAL	Suir (River)
44	SAL	Clodiagh (River)
45	ST	Dawn (River)
46	ST	Whelanbridge (River)
47	ST	Ballymoat (Stream)
48	ST	John's River
49	ST	Annestown (Stream)
50	SAL	Mahon (River)
51	SAL	Tay (River)
52	ST	Dalligan (River)
53	SAL	Colligan (River)
54	ST	Brickey (River)

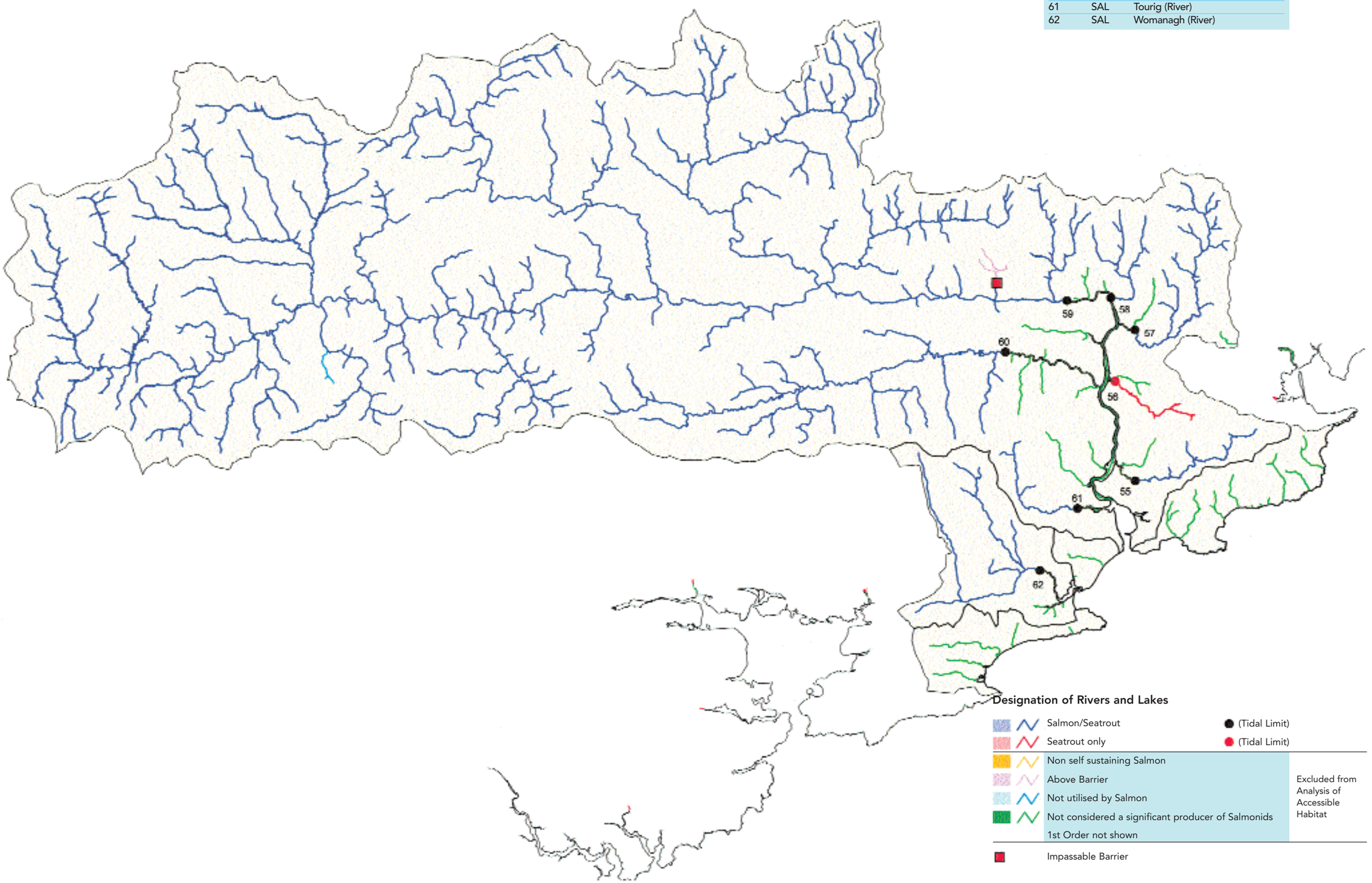


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 6 Lismore Fisheries District

Fishery Code	Fishery Type	River
55	SAL	Licky (River)
56	ST	Goish (River)
57	SAL	Finisk (River)
58	SAL	Glenshelane (River)
59	SAL	Blackwater (River)
60	SAL	Bride (River)
61	SAL	Tourig (River)
62	SAL	Womanagh (River)

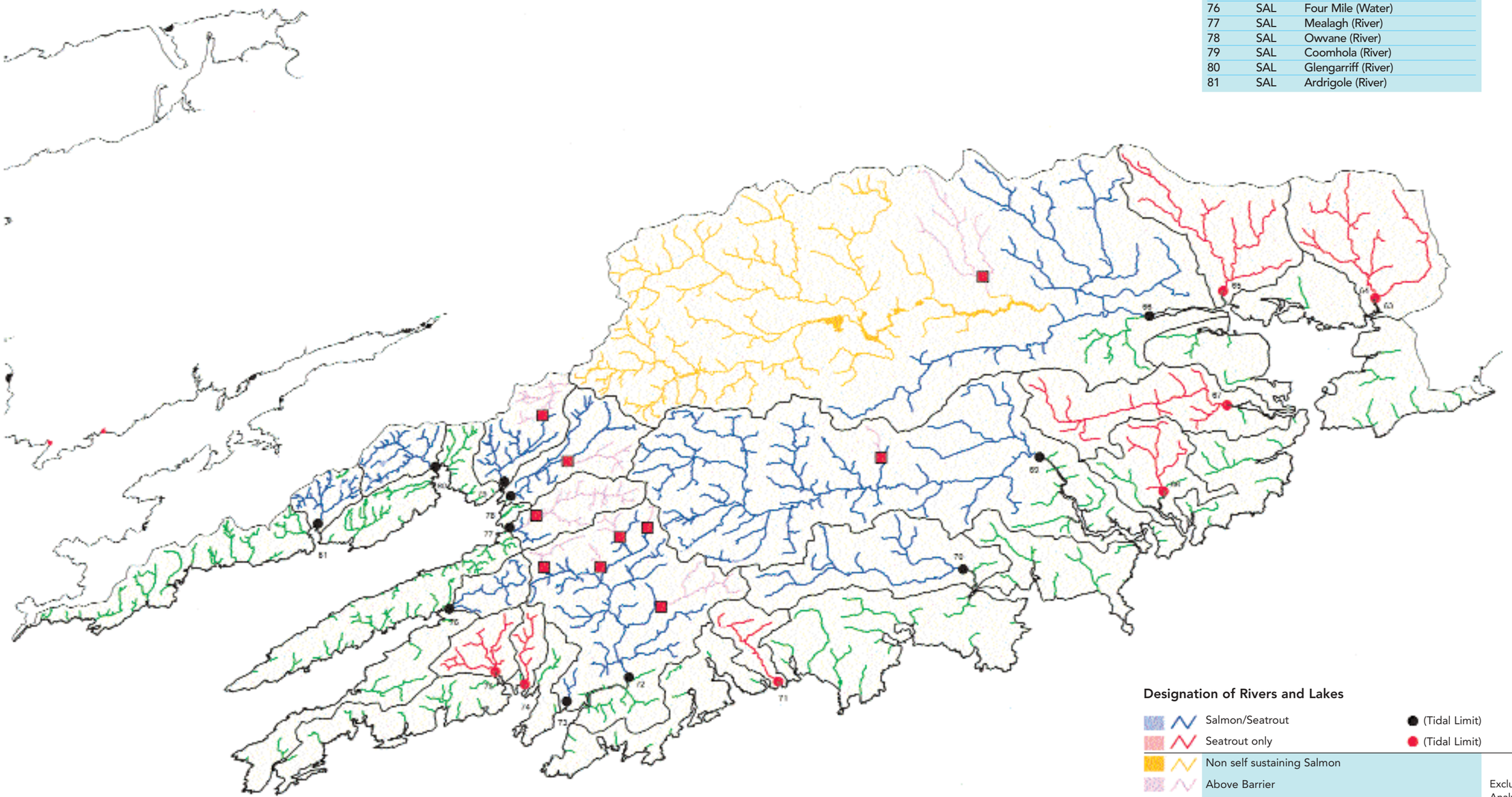


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 7 Cork Fisheries District

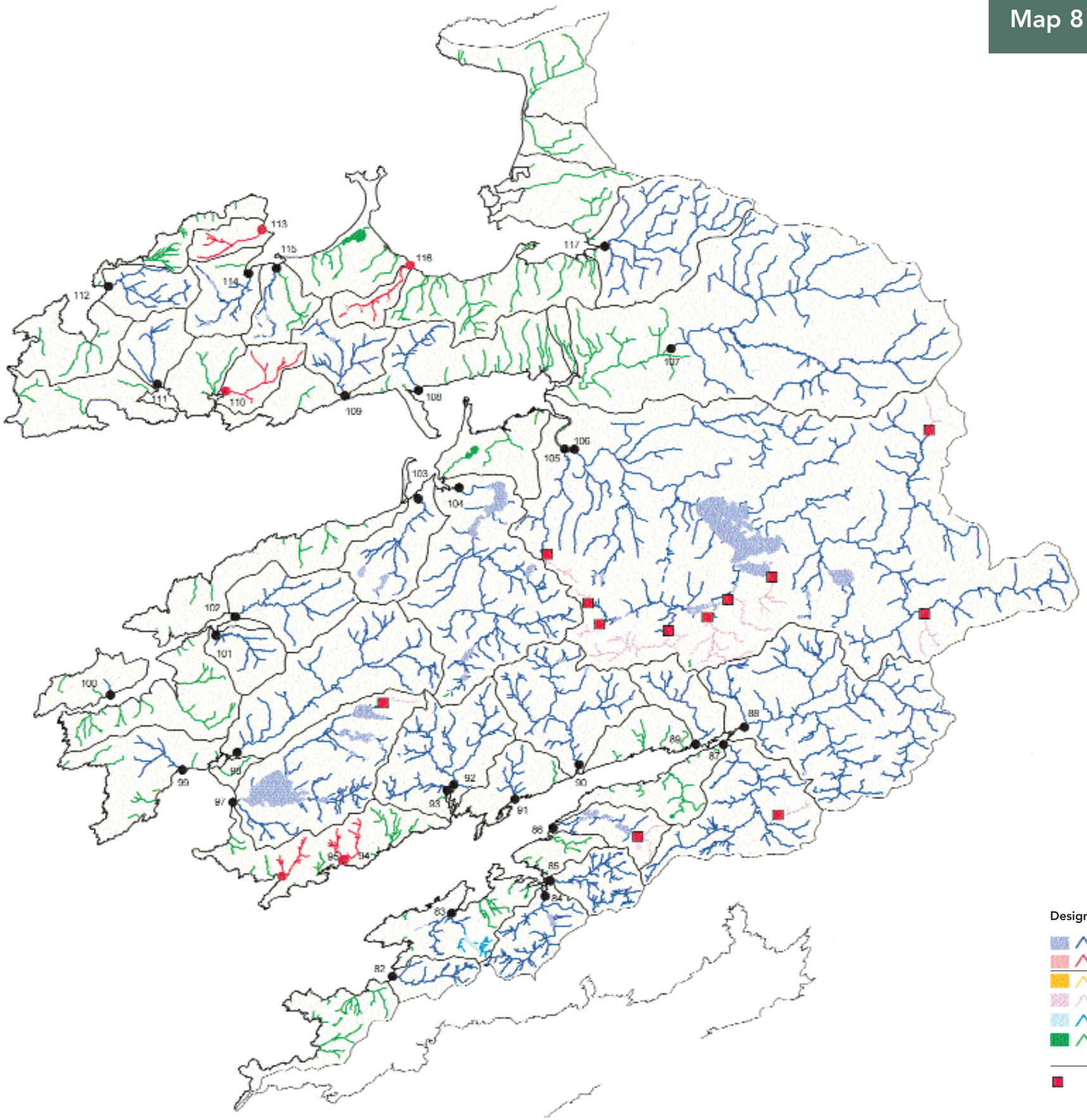
Fishery Code	Fishery Type	River
63	ST	Dungourney (River)
64	ST	Owennacurra (River)
65	ST	Glashaboy (River)
66	SAL	Lee (River)
67	ST	Owenboy (River)
68	ST	Stick (River)
69	SAL	Bandon (River)
70	SAL	Ardigeen (River)
71	ST	Roury (River)
72	SAL	Ilen (River)
73	SAL	Keal (Stream)
74	ST	Leamawaddra (River)
75	ST	Bawnaknockane (River)
76	SAL	Four Mile (Water)
77	SAL	Mealagh (River)
78	SAL	Owvane (River)
79	SAL	Coomhola (River)
80	SAL	Glengarriff (River)
81	SAL	Ardrigole (River)



Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 8 Kerry Fisheries District



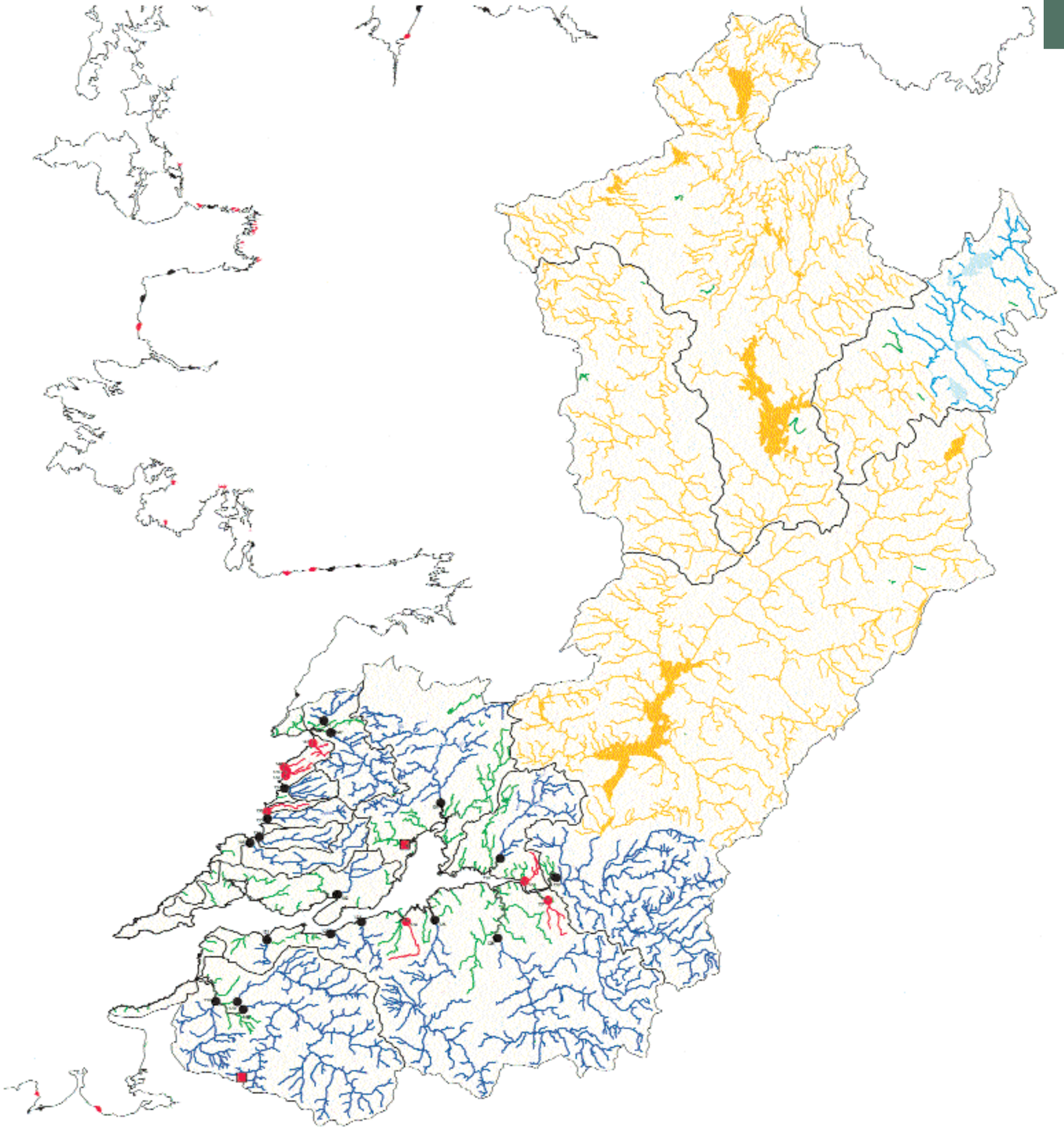
Fishery Code	Fishery Type	River
82	SAL	Kealincha (River)
83	SAL	Lough Fadda (Stream)
84	SAL	Croanshagh (River)
85	SAL	Owenshagh (River)
86	SAL	Cloonee (River)
87	SAL	Sheen (River)
88	SAL	Roughty (River)
89	SAL	Finnihy (River)
90	SAL	Blackwater (River)
91	SAL	Tahilla (River)
92	SAL	Sneem (River)
93	SAL	Owreagh (River)
94	ST	Staigue (River)
95	ST	Gowla (River)
96	ST	Coomnahorna (River)
97	SAL	Currane (River)
98	SAL	Inny (River)
99	SAL	Emlaghmore (River)
100	SAL	Caol
101	SAL	Carhan (River)
102	SAL	Ferta (River)
103	SAL	Behy (River)
104	SAL	Caragh (River)
105	SAL	Cottoners (River)
106	SAL	Laune (River)
107	SAL	Maine (River)
108	SAL	Emlagh (River)
109	SAL	Owenascaul (River)
110	ST	Owenalondrig (River)
111	SAL	Milltown (River)
112	SAL	Feohanagh (River)
113	ST	Owennafeana (River)
114	SAL	Owenmore (River)
115	SAL	Scorid (River)
116	ST	Owencashla (River)
117	SAL	Lee (River)

Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 9 Limerick Fisheries District

Fishery Code	Fishery Type	River
118	SAL	Brick (River)
119	SAL	Feale (River)
120	SAL	Galey (River)
121	SAL	Ballyline (River)
122	SAL	Glencorbly (River)
123	SAL	White (River)
124	ST	Ahacronane (River)
125	SAL	Deel (River)
126	SAL	Maigue (River)
127	ST	Ballincurra (Creek)
128	SAL	Shannon (River)
129	ST	Crompaun (River)
130	SAL	Owenagarney [Ratty] (River)
131	SAL	Fergus (River)
132	SAL	Cloon (River)
133	SAL	Doonbeg (River)
134	SAL	Skivileen (River)
135	SAL	Annageeragh (River)
136	ST	Aughaveema
137	SAL	Annagh (River)
138	ST	Cloonbony (River)
139	ST	Ballyvaskin (River)
140	ST	Freagh (River)
141	ST	Moy (River)
142	SAL	Inagh (River)
143	SAL	Aughyvackeen (River)

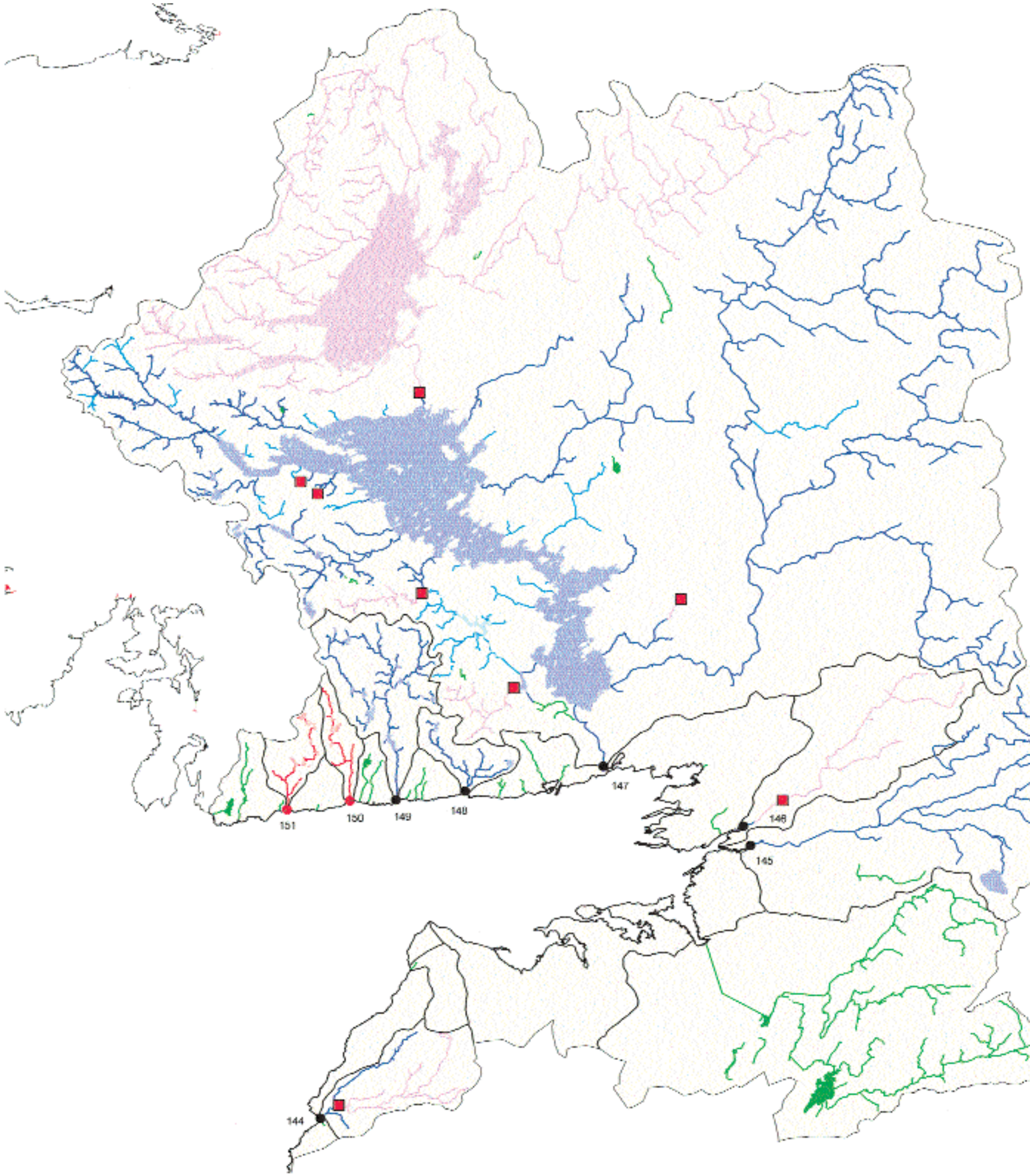


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 10 Galway Fisheries District

Fishery Code	Fishery Type	River
144	SAL	Aille (River)
145	SAL	Kilcogan (River)
146	SAL	Clarinbridge (River)
147	SAL	Corrib (River)
148	SAL	Knock (River)
149	SAL	Owenboliska
150	ST	Owenriff [South Galway]
151	ST	Crumlin (River)

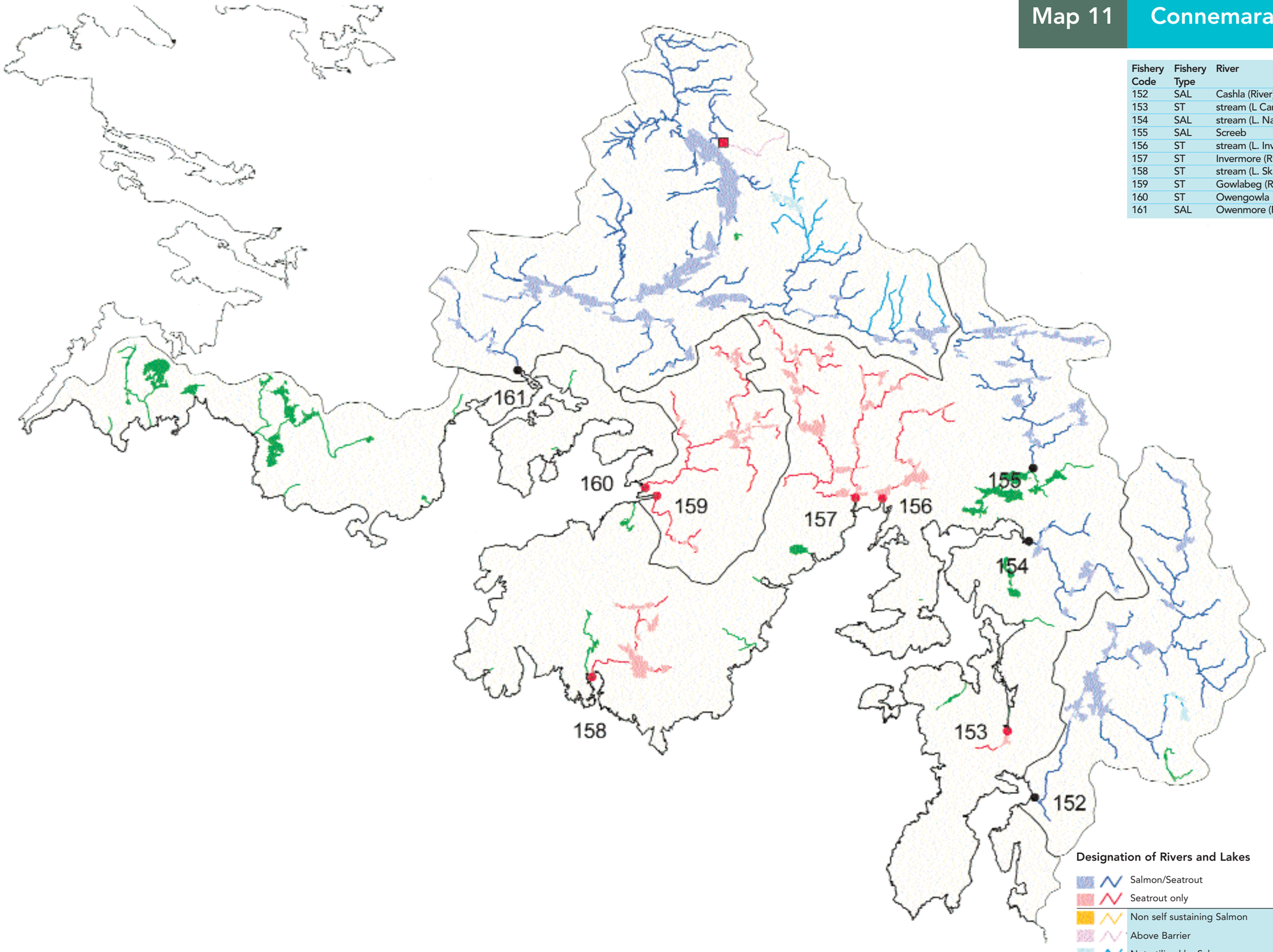


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 11 Connemara Fisheries District

Fishery Code	Fishery Type	River
152	SAL	Cashla (River)
153	ST	stream (L Carrafinla)
154	SAL	stream (L. Nafurnace)
155	SAL	Screeb
156	ST	stream (L. Inverbeg)
157	ST	Invermore (River)
158	ST	stream (L. Skannive)
159	ST	Gowlabeg (River)
160	ST	Owengowla
161	SAL	Owenmore (River)

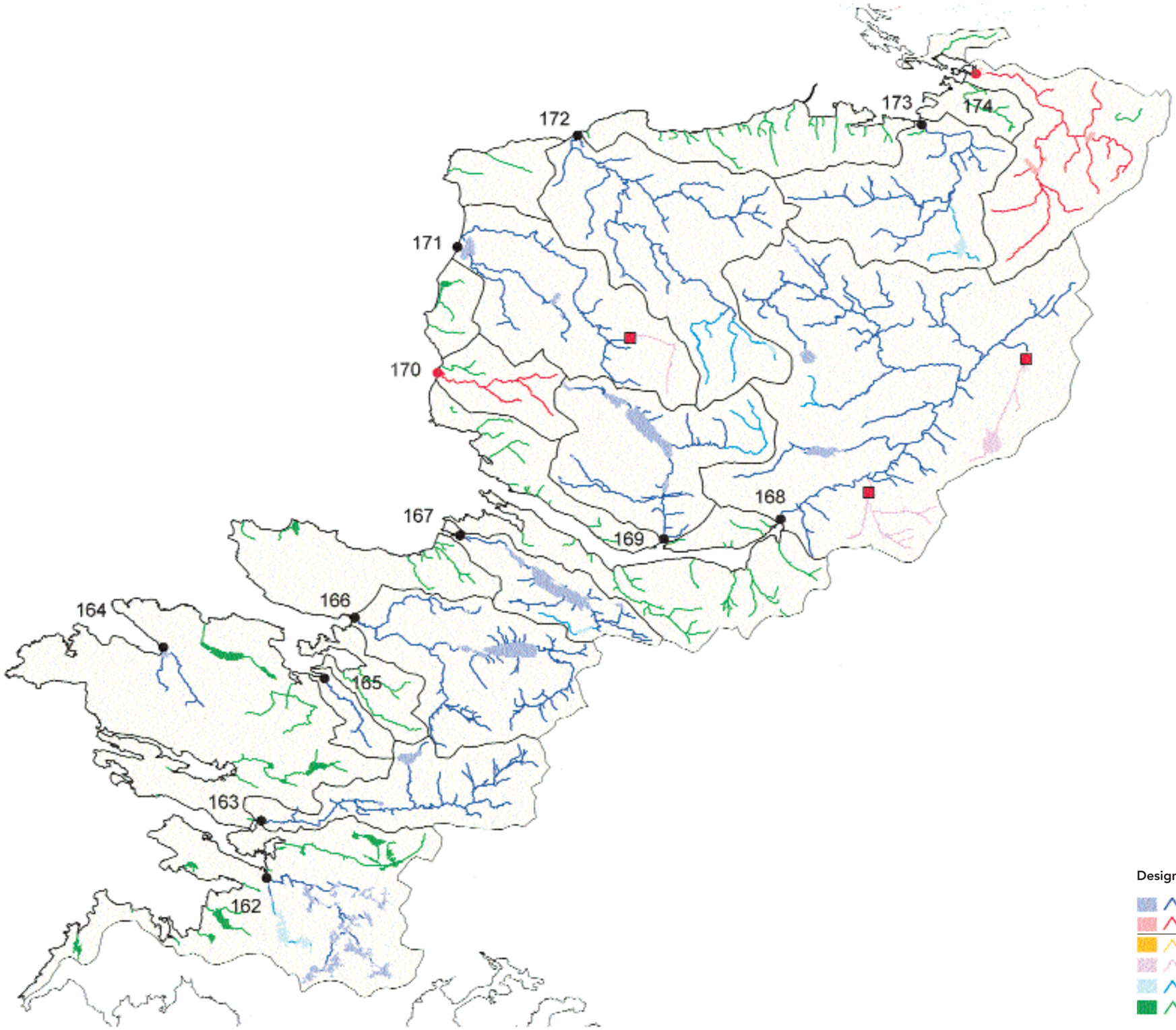


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 12 Ballinakill Fisheries District

Fishery Code	Fishery Type	River
162	SAL	Ballinaboy (River)
163	SAL	Owenglin (River)
164	SAL	Cleggan (River)
165	SAL	Traheen (River)
166	SAL	Dawros (River)
167	SAL	Culfin (River)
168	SAL	Erriff (River)
169	SAL	Bundorragha (River)
170	ST	Owennadornaun
171	SAL	Carrownisky (River)
172	SAL	Bunowen (River)
173	SAL	Owenwee (River)
174	ST	Carrowbeg (River)

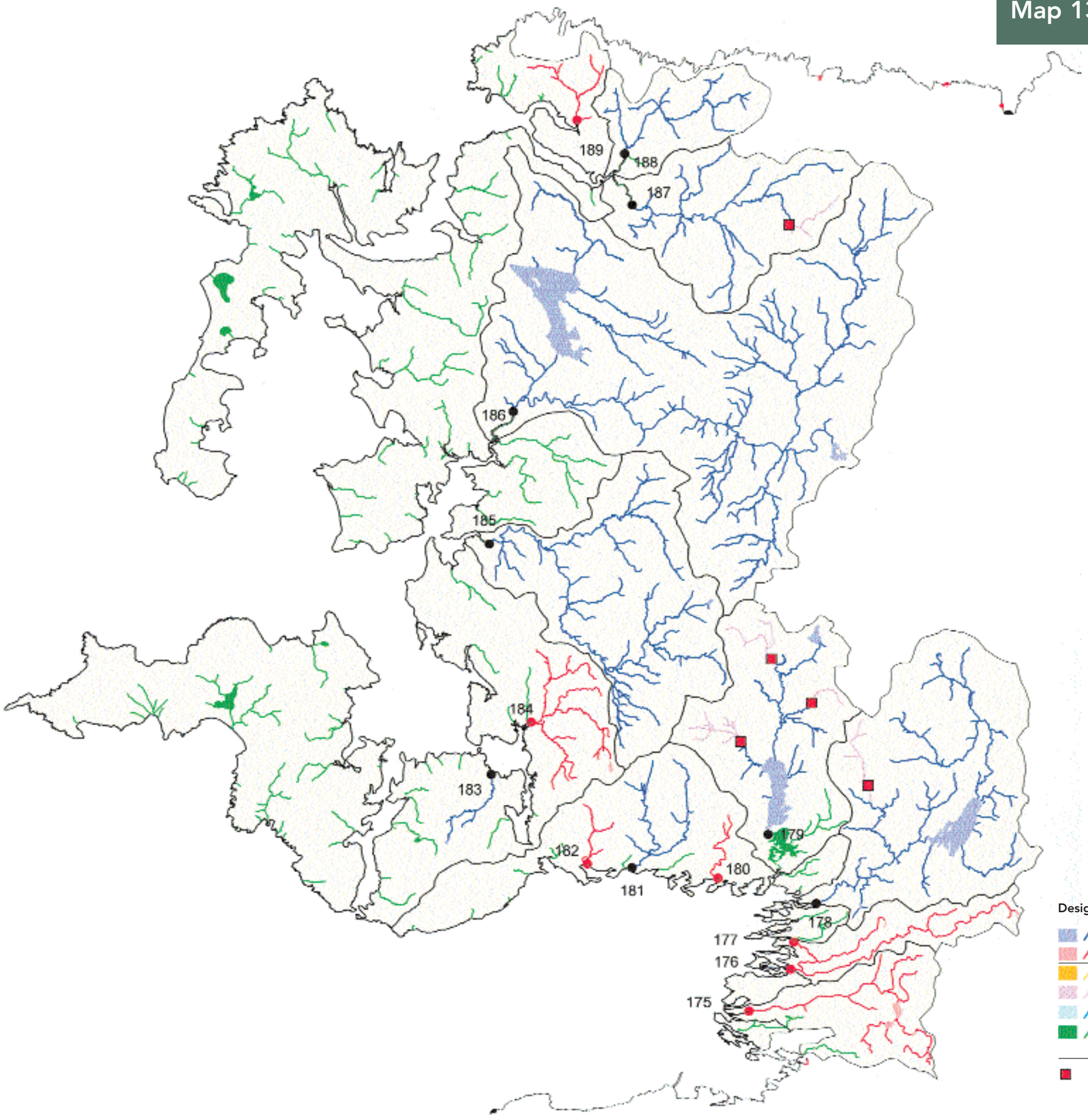


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 13 Bangor Fisheries District

Fishery Code	Fishery Type	River
175	ST	Moyour (River)
176	ST	Owennabrockagh
177	ST	Rossow (River)
178	SAL	Newport (River)
179	SAL	Srahmore (River)
180	ST	Carrowsallagh (River)
181	SAL	Owengarve (River)
182	ST	Bunnahowna (River)
183	SAL	Cartron (River)
184	ST	Bellagarvaun
185	SAL	Owenduff
186	SAL	Owenmore (River)
187	SAL	Glenamoy (River)
188	SAL	Muingnabo (River)
189	ST	Gweedaney

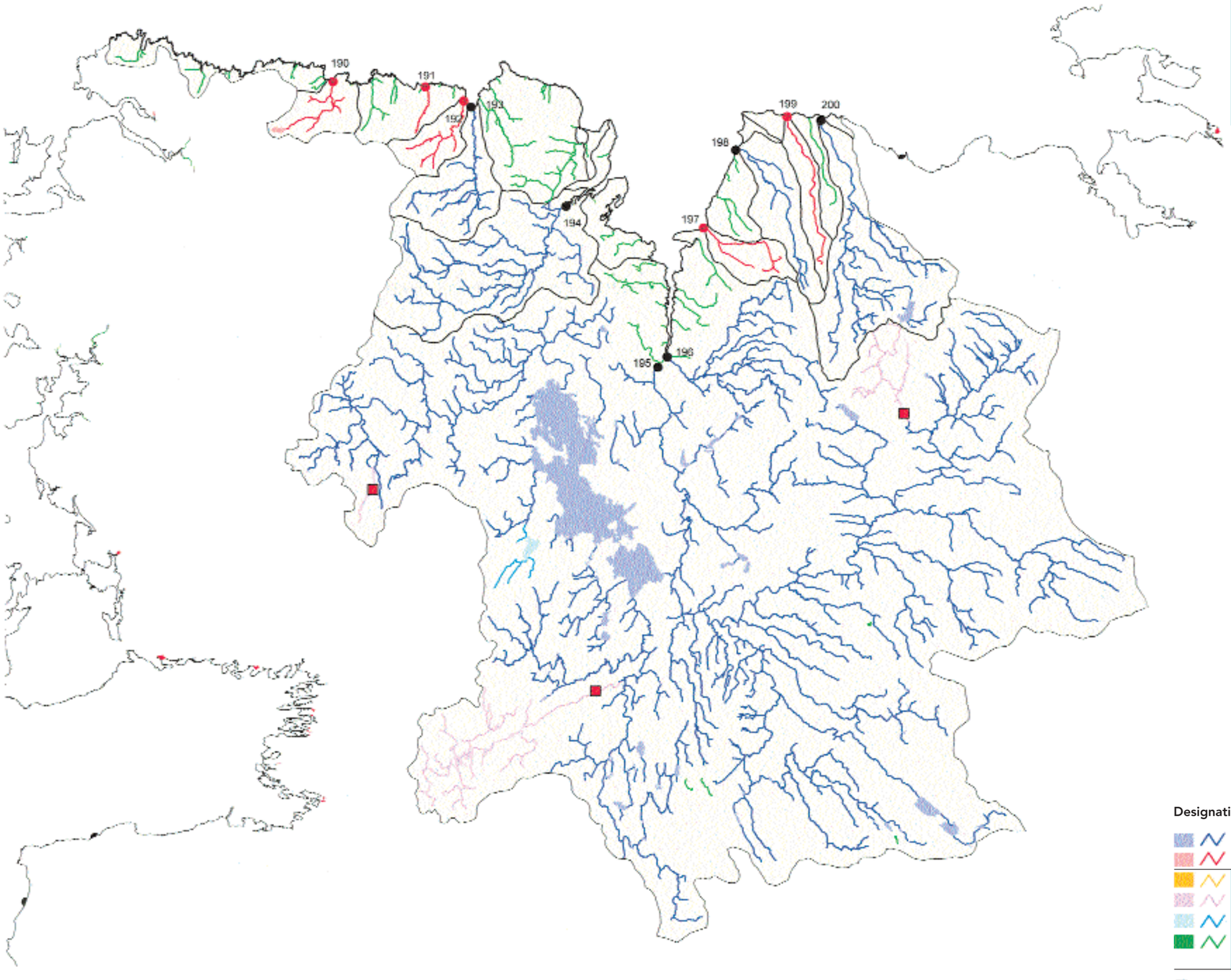


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 14 Ballina Fisheries District

Fishery Code	Fishery Type	River
190	ST	Belderg (River)
191	ST	Glenulra (River)
192	ST	Bellananaminnaun (River)
193	SAL	Ballinglen (River)
194	SAL	Cloonaghmore (River)
195	SAL	Moy (River)
196	SAL	Brusna (River)
197	ST	Bellawaddy (River)
198	SAL	Leaffony (River)
199	ST	Owenykeevan (River)
200	SAL	Easky (River)
201	SAL	Dunneill (River)

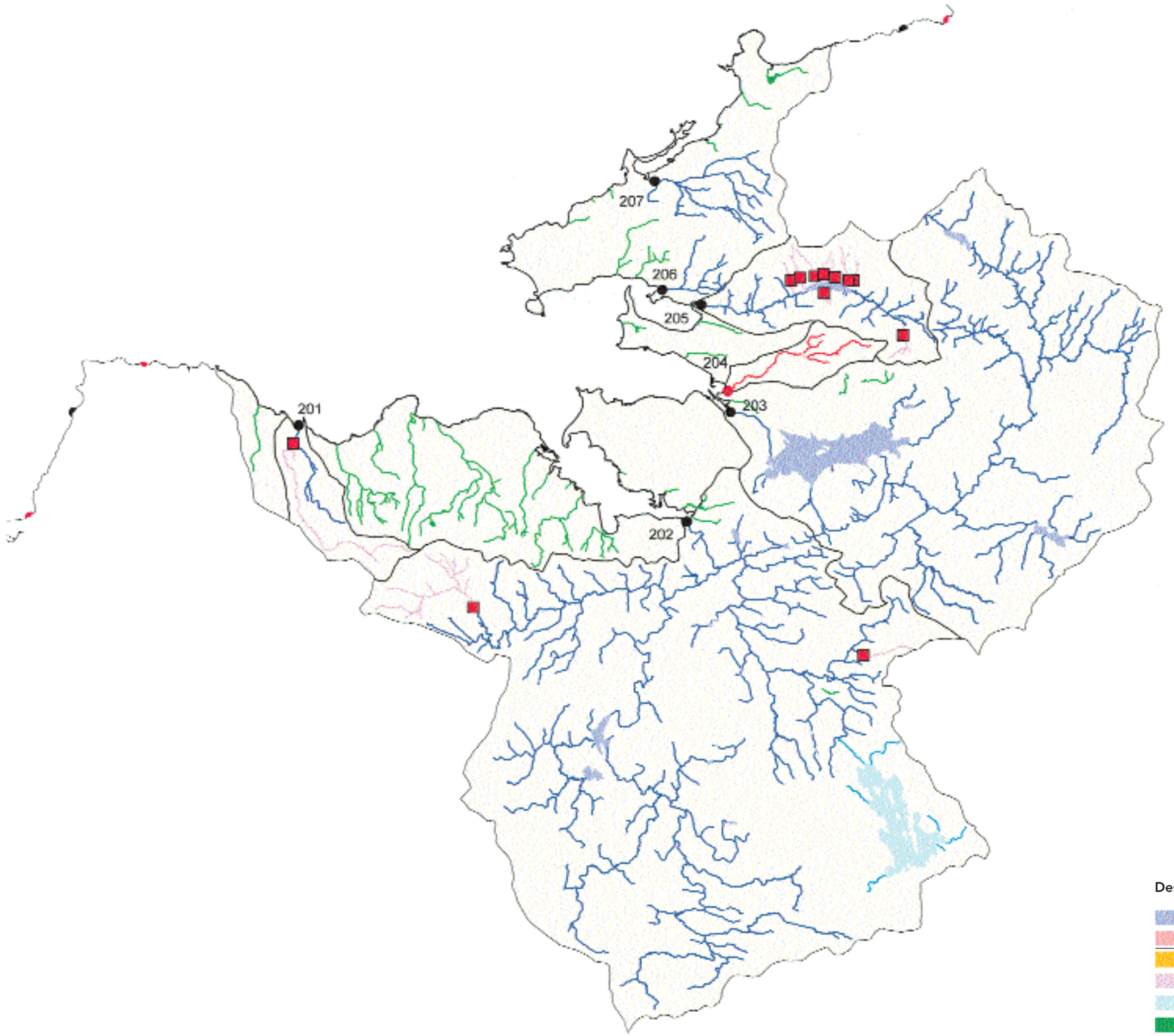


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 15 Sligo Fisheries District

Fishery Code	Fishery Type	River
201	SAL	Dunneill (River)
202	SAL	Ballysadare (River)
203	SAL	Garvoge (River)
204	ST	Willsborough (Stream)
205	SAL	Drumcliff (River)
206	SAL	Carney (River)
207	SAL	Grange (River)

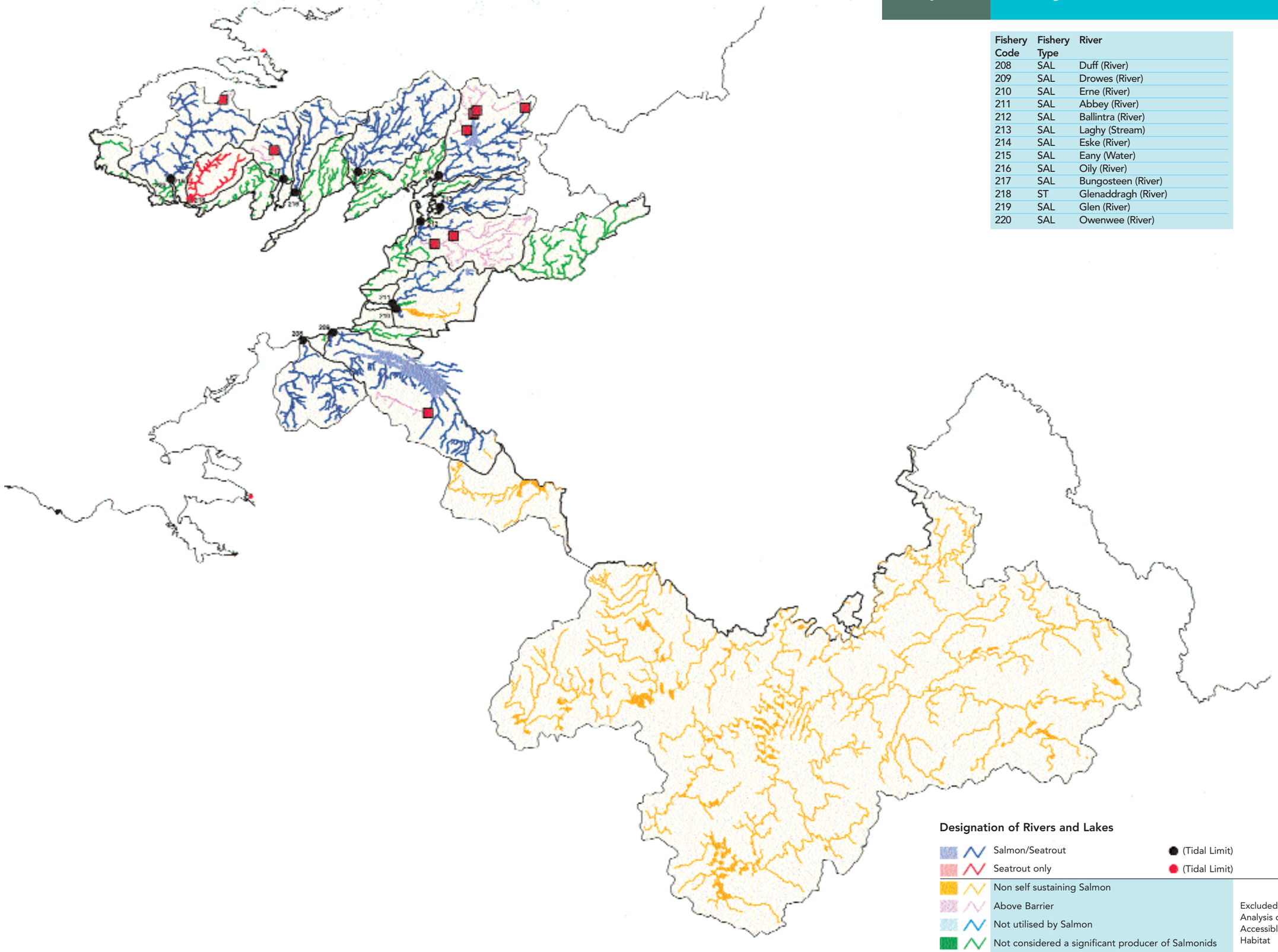


Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 16 Ballyshannon Fisheries District

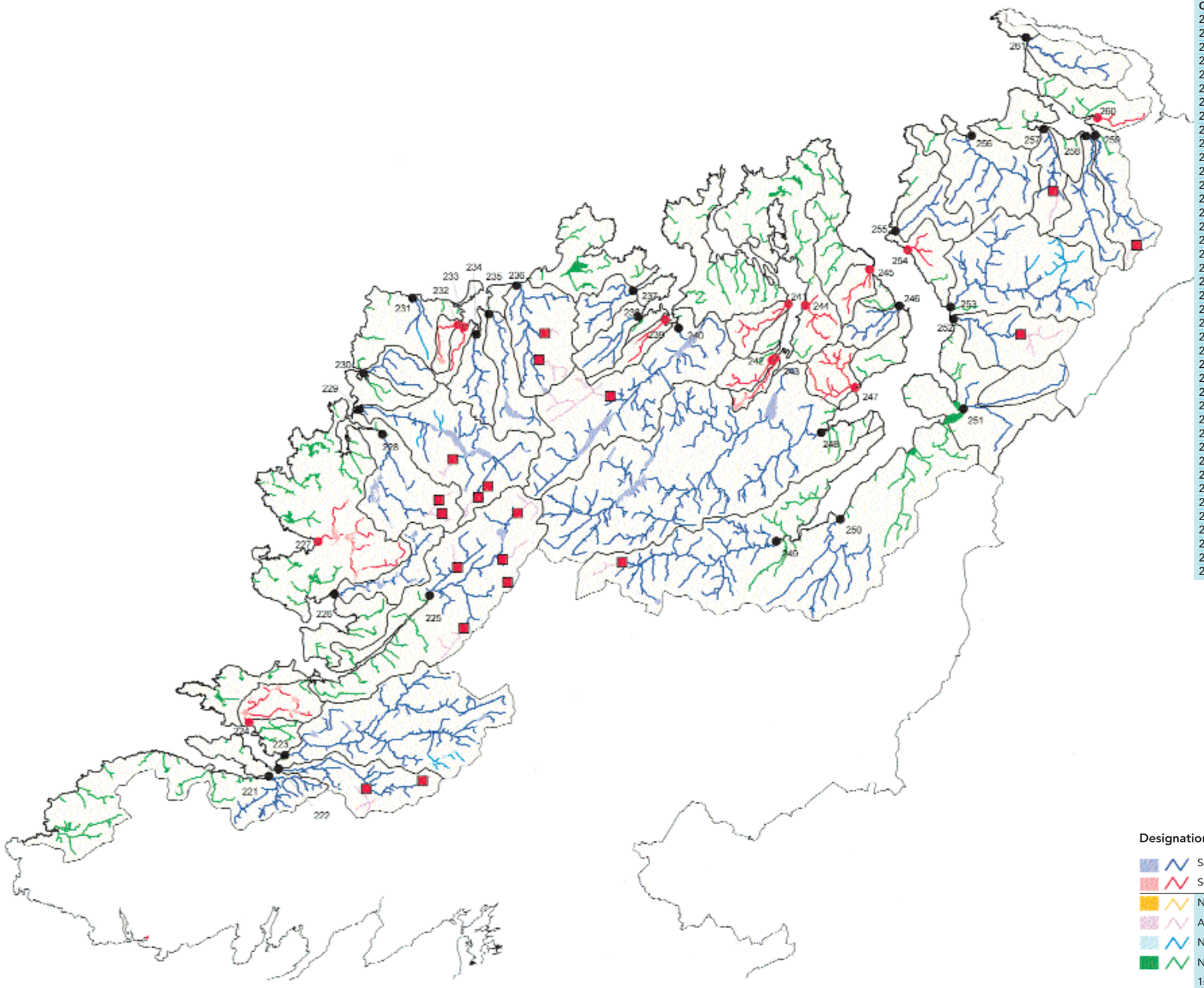
Fishery Code	Fishery Type	River
208	SAL	Duff (River)
209	SAL	Drowes (River)
210	SAL	Erne (River)
211	SAL	Abbey (River)
212	SAL	Ballintra (River)
213	SAL	Laghy (Stream)
214	SAL	Eske (River)
215	SAL	Eany (Water)
216	SAL	Oily (River)
217	SAL	Bungosteen (River)
218	ST	Glenaddragh (River)
219	SAL	Glen (River)
220	SAL	Owenwee (River)



Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Map 17 Letterkenny Fisheries District



Fishery Code	Fishery Type	River
221	SAL	Bracky (River)
222	SAL	Owentocker (River)
223	SAL	Owenea (River)
224	ST	Duvoge (River)
225	SAL	Gweebarra (River)
226	SAL	Owennamarve (River)
227	ST	Dunglow (River)
228	SAL	Gweedore (River)
229	SAL	Clady (River)
230	SAL	Owencronahulla
231	SAL	Glen (River)
232	ST	Owenawillin
233	ST	Owentully
234	SAL	Glenna (River)
235	SAL	Tullaghobegly (River)
236	SAL	Ray (River)
237	SAL	Derryart (River)
238	SAL	Faymore (River)
239	ST	Duntally (River)
240	SAL	Lackagh (River)
241	ST	Big (Burn)
242	ST	Bunlin (River)
243	ST	Loughkeel (Burn)
244	ST	Burnside (River)
245	ST	Glenvar (River)
246	SAL	Drumhallagh (River)
247	ST	Glenalla (River)
248	SAL	Leannan (River)
249	SAL	Swilly (River)
250	SAL	Isle (Burn)
251	SAL	Burnfoot
252	SAL	Mill (River)
253	SAL	Crana (River)
254	ST	Aghaweel (River)
255	SAL	Owenerk (River)
256	SAL	Clonmany (River)
257	SAL	Straid (River)
258	SAL	Donagh (River)
259	SAL	Glennagannon (River)
260	ST	Ballyboe (River)
261	SAL	Culoort (River)

Designation of Rivers and Lakes

Salmon/Seatrout	(Tidal Limit)	
Seatrout only	(Tidal Limit)	
Non self sustaining Salmon		Excluded from Analysis of Accessible Habitat
Above Barrier		
Not utilised by Salmon		
Not considered a significant producer of Salmonids		
1st Order not shown		
Impassable Barrier		

Central Fisheries Board

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