



WATER FRAMEWORK DIRECTIVE FRESHWATER FISH MONITORING PROGRAMME IN THE FOYLE AND CARLINGFORD AREAS

LOWER FOYLE CATCHMENT STAKEHOLDER GROUP MEETING
18TH MAY 2010 ROE VALLEY HOSPITAL, LIMAVADY



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OUTLINE OF PRESENTATION

- Overview of Northern Ireland WFD fish monitoring programme
- River and Lake fish monitoring in the Foyle and Carlingford areas
- Methods
- Case study
- Potential Programmes of Measures
- Conclusion



FISH MONITORING REQUIREMENTS UNDER WFD ANNEX V

SURFACE WATER STATUS

- 1.RIVERS
- 2.LAKES
- 3.TRANSITIONAL WATERS
- 4.COASTAL WATERS
- 5.ARTIFICIAL AND HEAVILY MODIFIED WATER BODIES

MONITORING OF ECOLOGICAL STATUS

- 1.SURVEILLANCE MONITORING
- 2.OPERATIONAL MONITOING
- 3.INVESTIGATIVE MONITORING



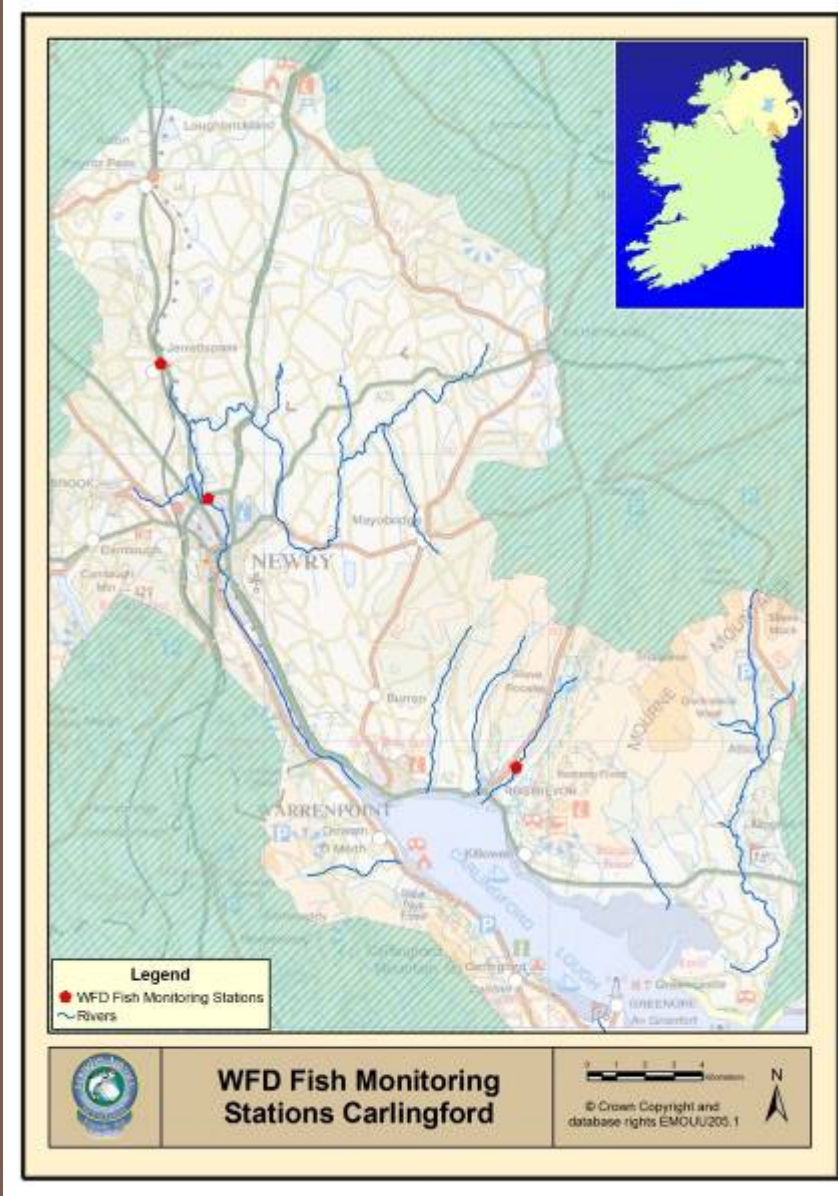
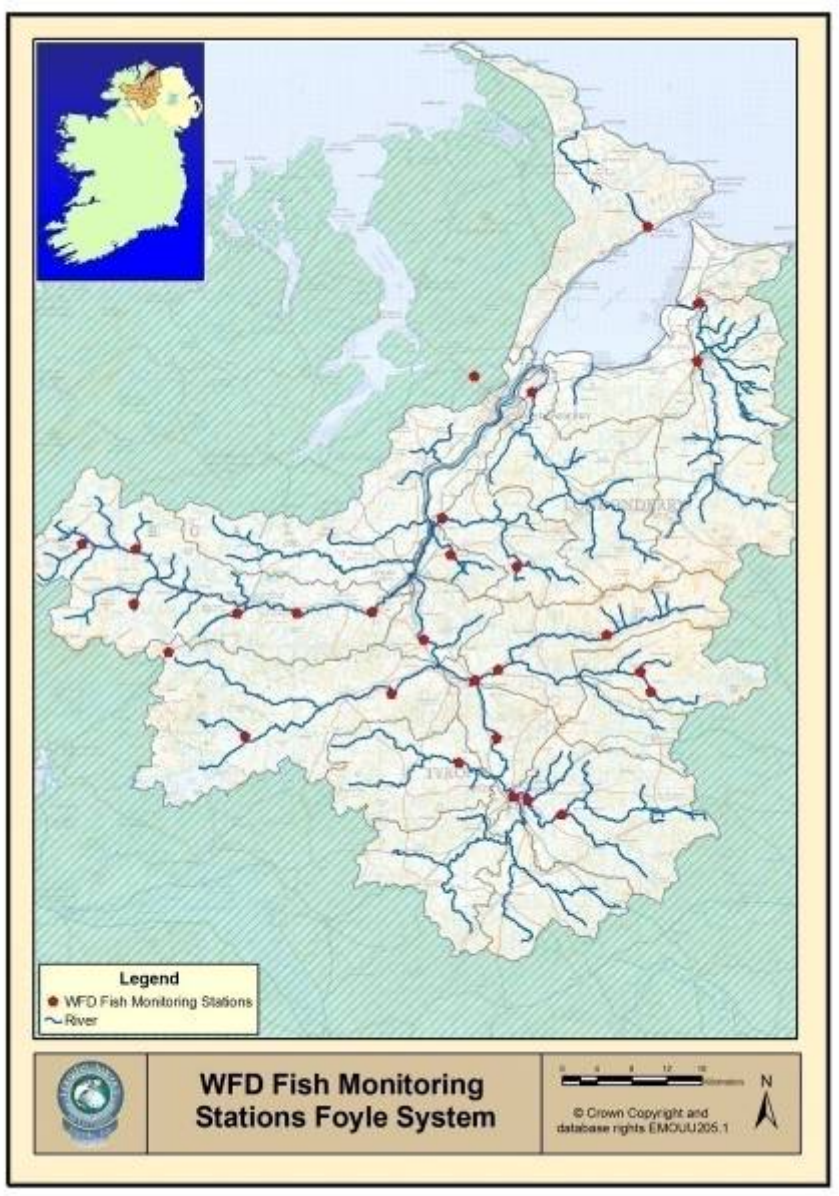
FISH MONITORING REQUIREMENTS UNDER WFD ANNEX V

QUALITY ELEMENTS FOR THE CLASSIFICATION OF ECOLOGICAL STATUS

RIVERS

- Biological elements
 - Composition and abundance of aquatic flora
 - Composition and abundance of benthic invertebrate fauna
 - Composition, abundance and age structure of fish fauna





WFD FISH SURVEILLANCE MONITING STATIONS LA AREAS

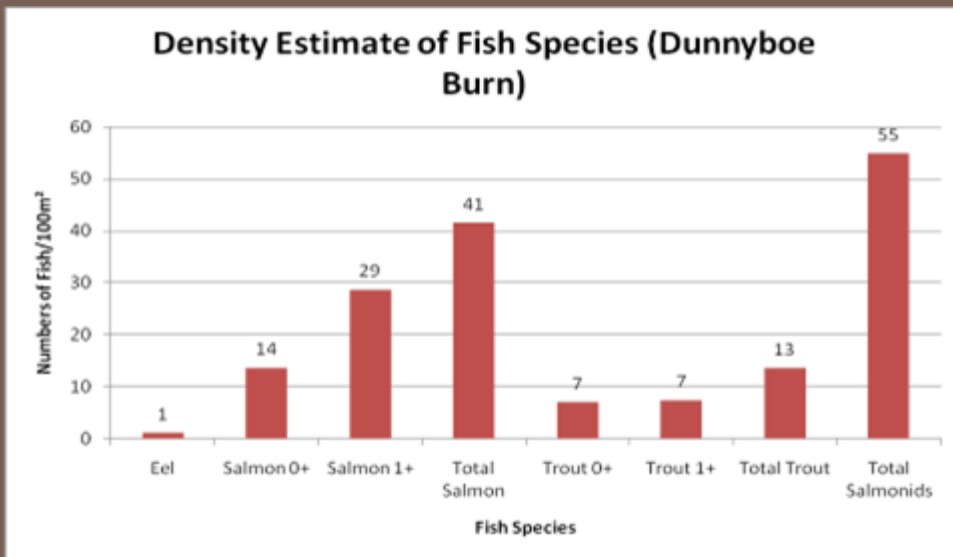
F10020 Dunnyboe Burn Fish Classification 2009

GBNI1NW010101072

BurndennetWFD

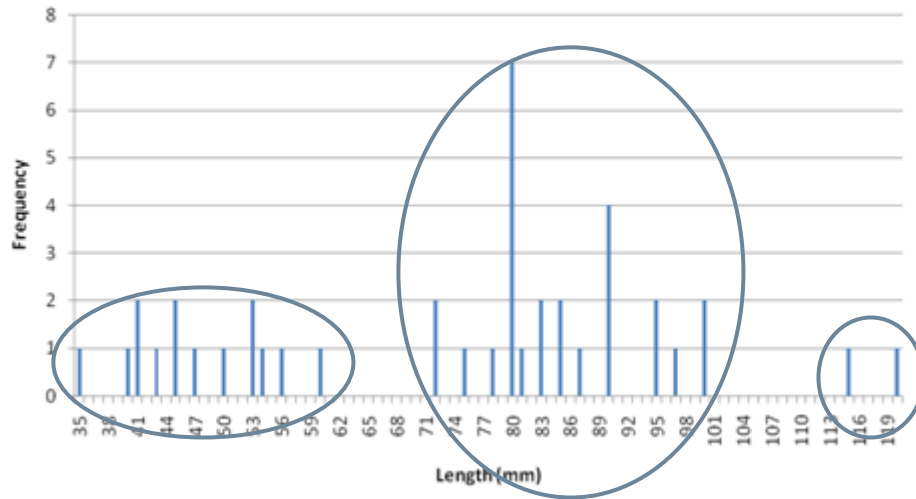
GOOD

FISHING	Salmon 0+	Salmon 1+	Trout 0+	Trout 1+	Eel	Total
1st	13	19	5	3	0	40
2nd	1	6	2	2	1	12
3rd	0	3	0	1	0	4
TOTAL	14	28	7	6	1	56

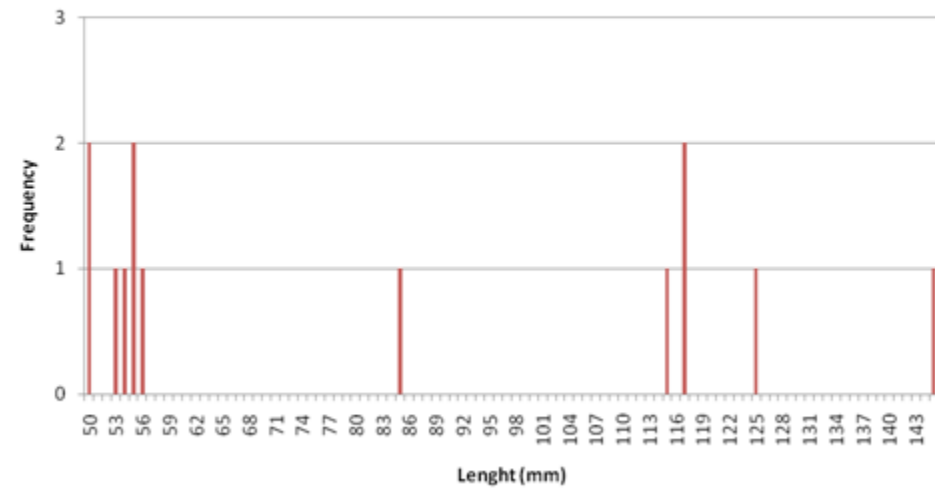


EXEMPLAR

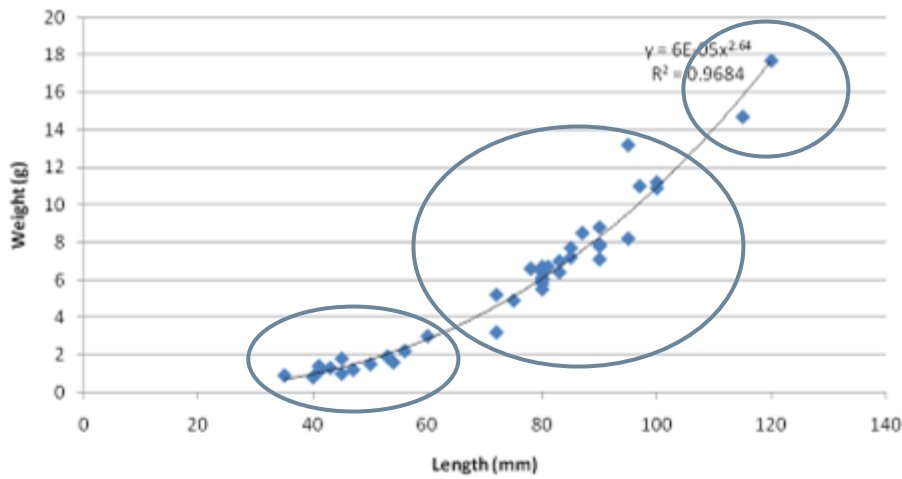
Length Frequency of Salmon 0+ and Salmon 1+ Dunnyboe Burn (N=42)



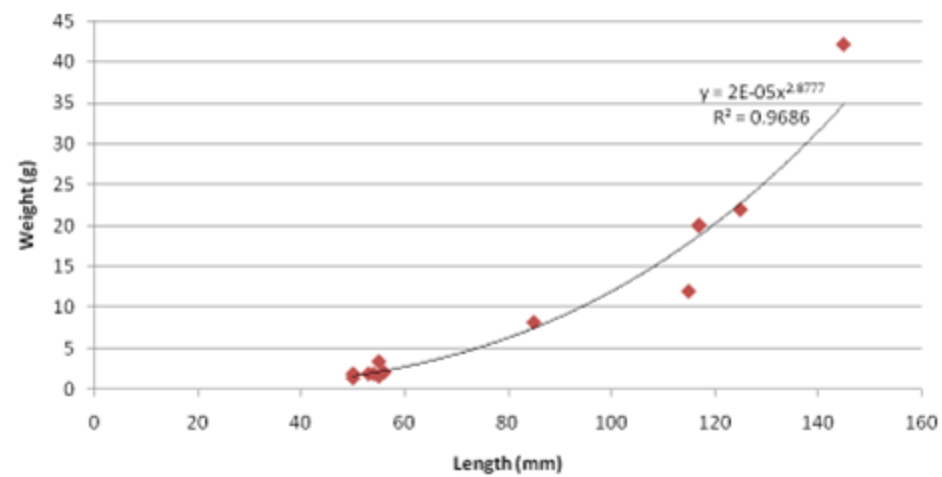
Length Frequency of Trout 0+ and Trout 1+ Dunnyboe Burn (N=13)



Length Weight Relationship of Salmon 0+ and Salmon 1+ Dunnyboe Burn 2009 (N=42)

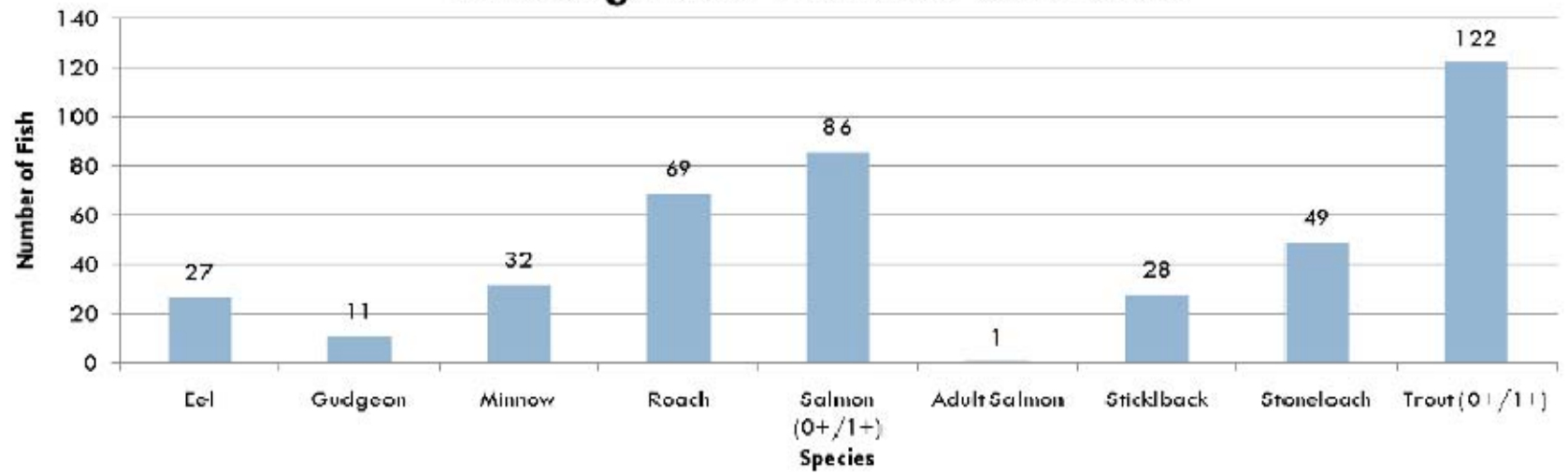


Length Weight Relationship of Trout 0+ and Trout 1+ Dunnyboe Burn (N=13)

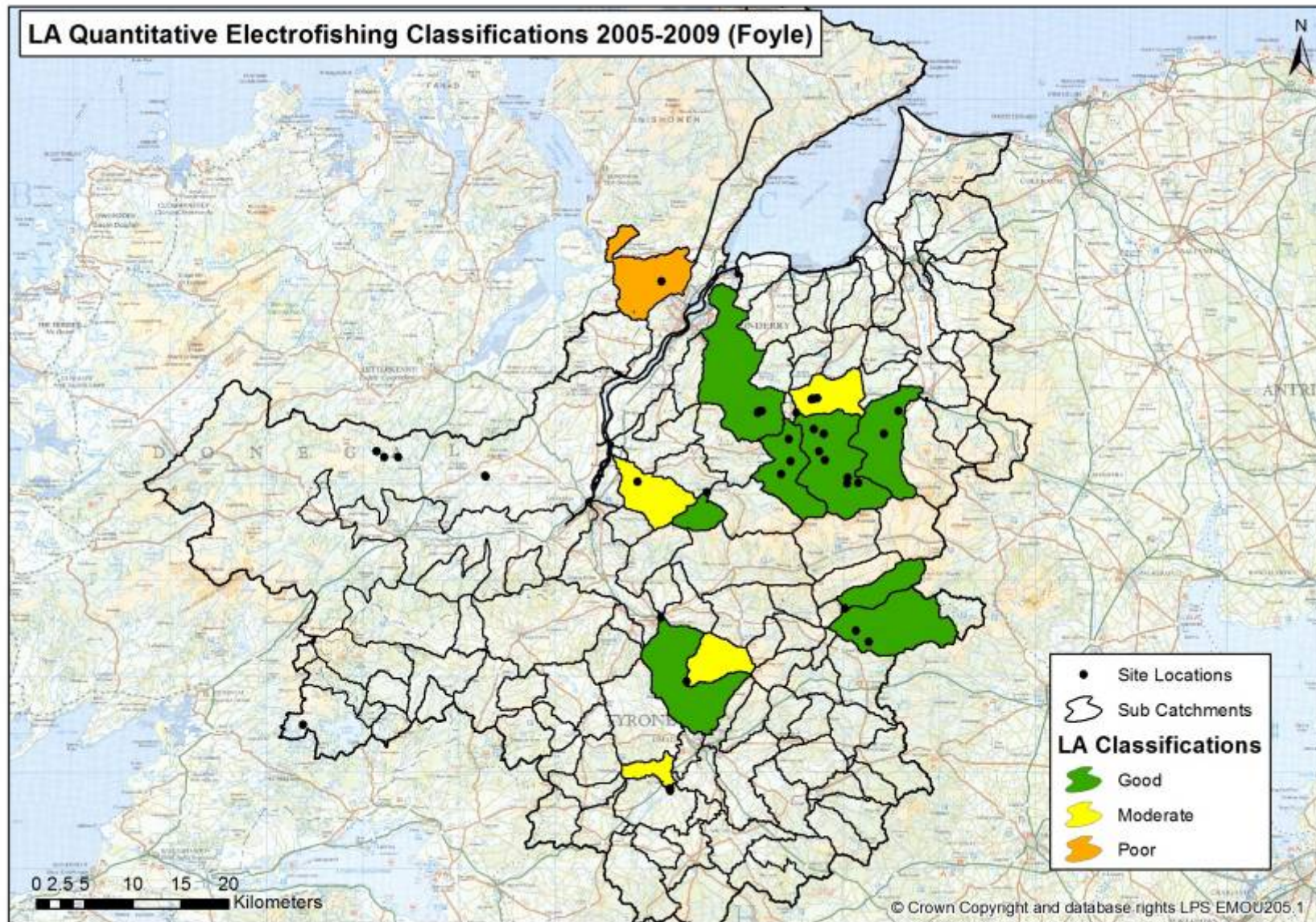


EXEMPLAR

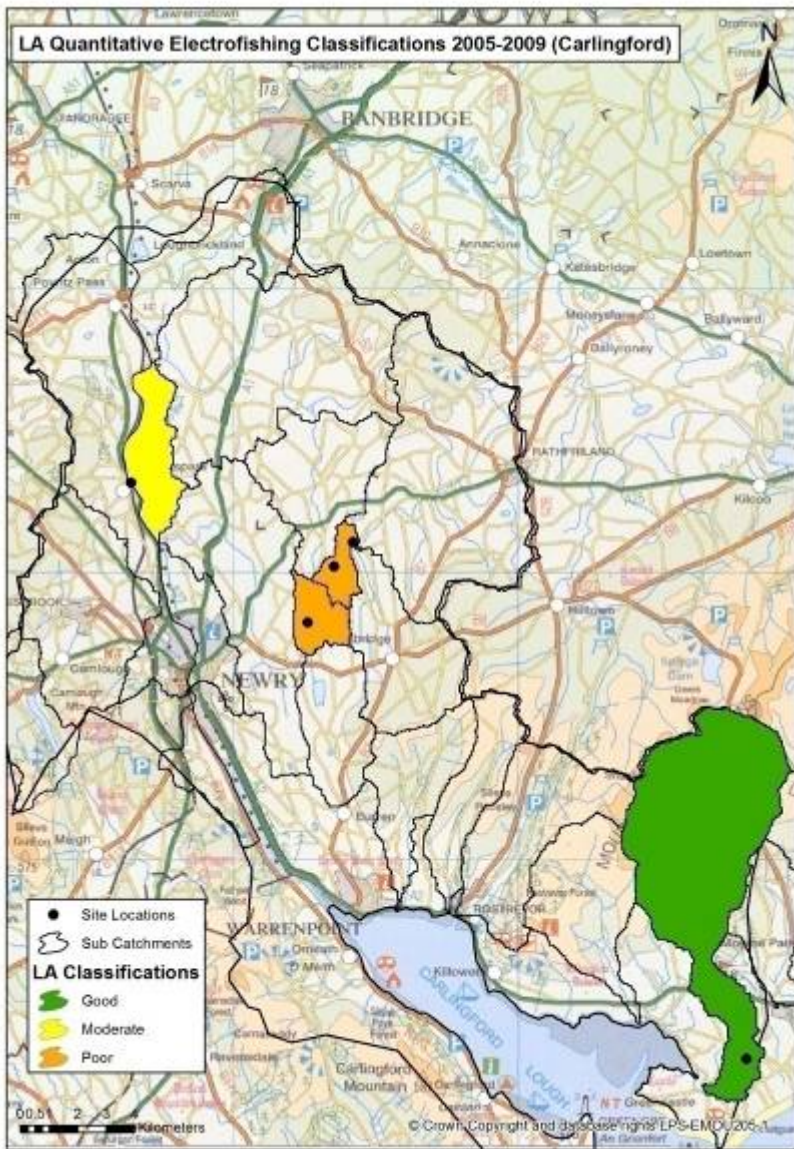
WFD Large River Trial River Strule 2008



LA Quantitative Electrofishing Classifications 2005-2009 (Foyle)



FOYLE AREA WFD FISH SURVEILLANCE MONITORING CLASSIFICATIONS 2009



CARLINGFORD AREA WFD FISH SURVEILLANCE MONITORING CLASSIFICATIONS 2009

CASE STUDY 1. WOODBURN 2006, MITIGATION FOR 2005 FISH KILL



Woodburn Habitat Improvement (2006) Habitat Units Riparian
Stock Proof Fencing and Riparian Buffer Zone Creation



EXAMPLES OF HABITAT IMPROVEMENTS





RIPARIAN FENCING AND NURSERY SUBSTRATE INTRODUCTION

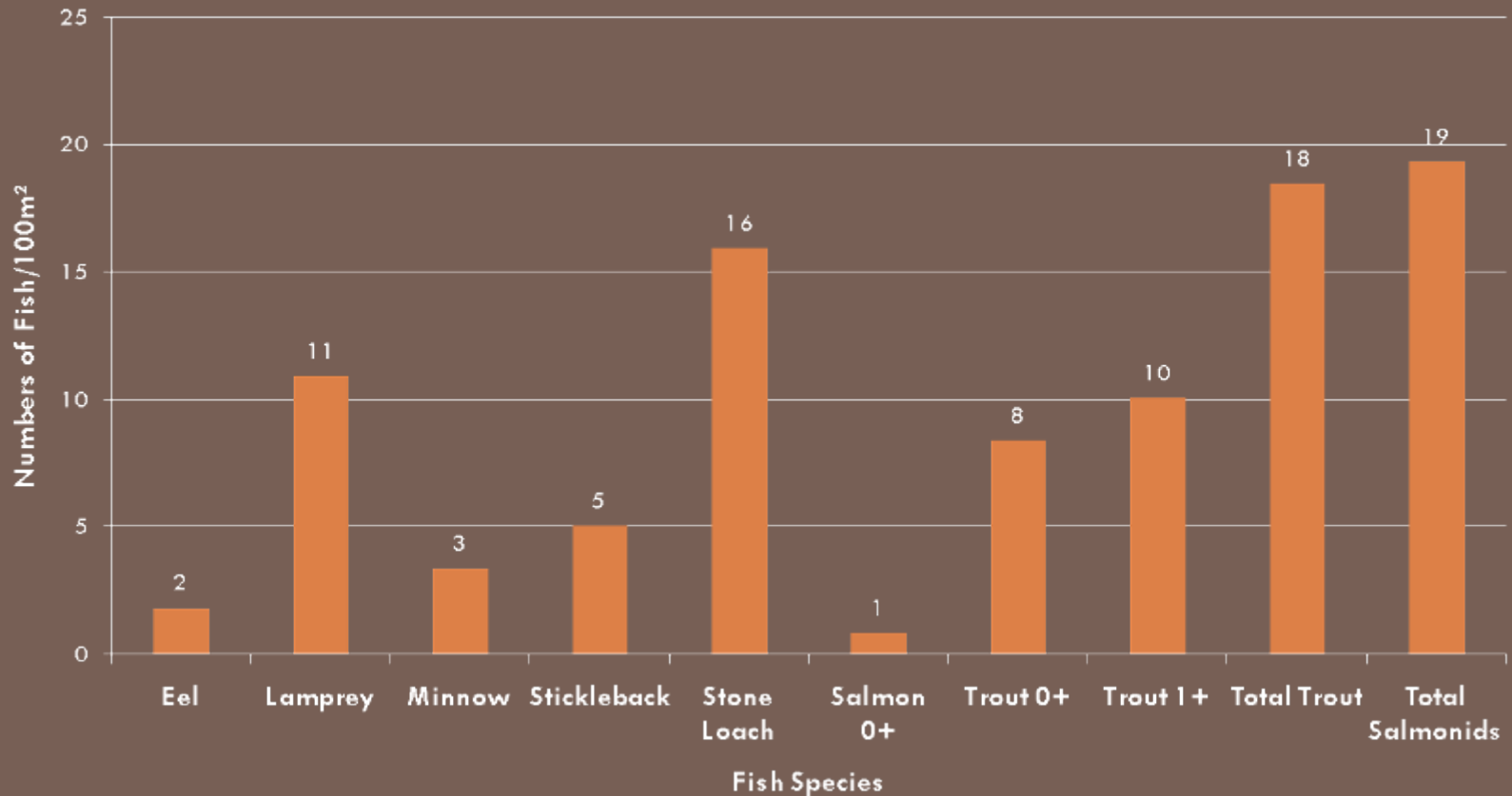
METHODS AND MATERIALS CONTINUED



RIPARIAN FENCING AND BUFFER ZONES (LIMITED ACCESS GRAZING)

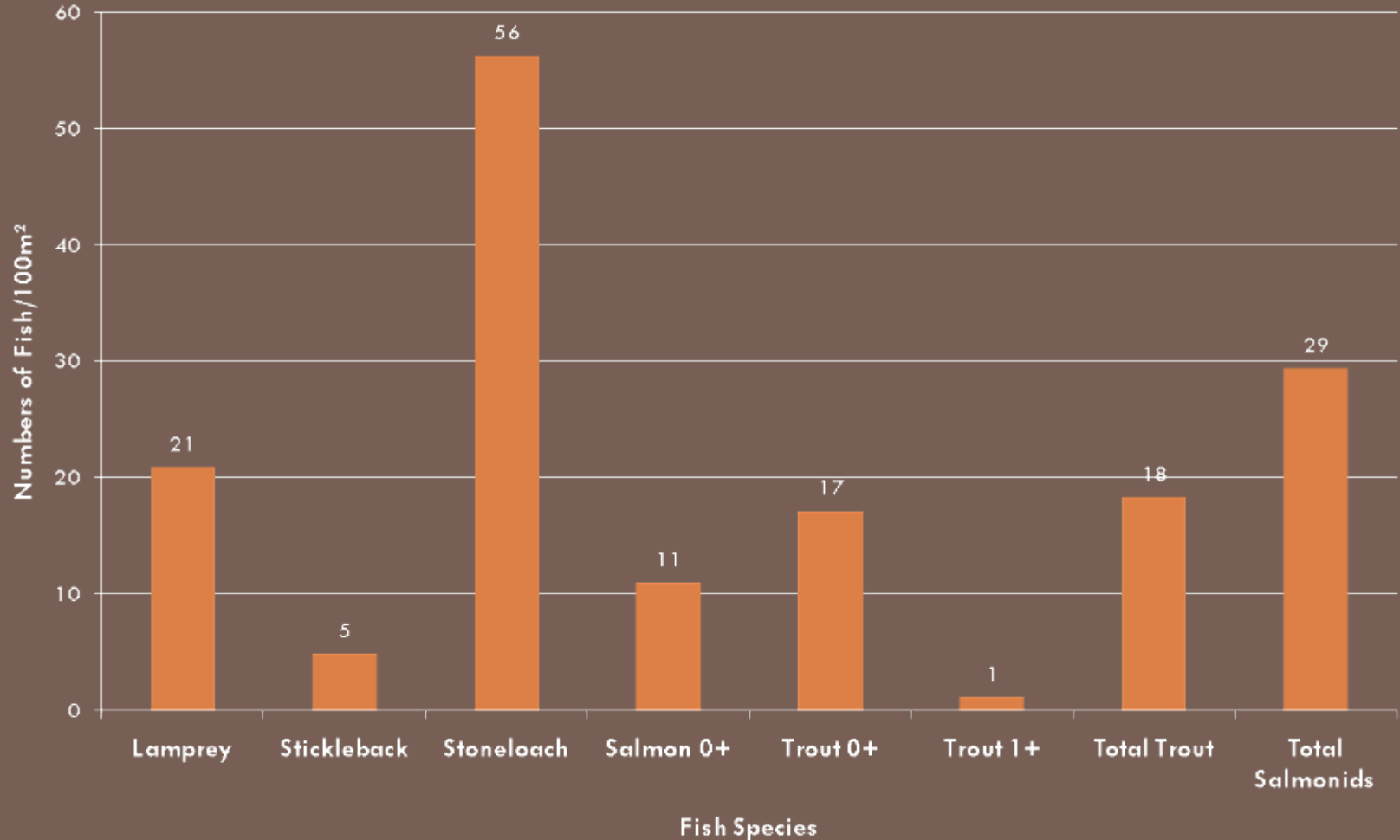
CASE STUDY CREEVAN BURN 2009

Density Estimate of Fish Species (Creevan Burn Control)



B4 IMPROVEMENTS

Density Estimate of Fish Species (Creevan Burn Experimental)



B4 IMPROVEMENTS

CONCLUSION

- **Lough/Lake Fish Surveys to commence in Foyle area in 2010 following methodology developed under NS SHARE by AFBI (4 WFD surveillance Loughs, 3 Foyle 1 Carlingford)**
- **Fish in rivers surveillance monitoring to continue on a 3 year rolling basis**
- **Programmes of measures to be implemented. Significant arterially drained channels in Lower Foyle area which could form the platform for fishery and hydromorphological improvements. In collaboration with statutory and non statutory partners**
- **Ongoing development of FCS II. Final methodology to be implemented across Ecoregion 17 (Island of Ireland) and Scotland.**

River Roe and Tributaries Catchment Status Report 2008



Loughs Agency of the
Foyle Carlingford and
Irish Lights Commission



River Roe and Tributaries Catchment Status Report 2008



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Inside cover picture of cock salmon in breeding
dress courtesy of Atlantic Salmon Trust



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2008 Catchment Status Reports are available from the
Loughs Agency website www.loughs-agency.org
2009 reports available by July 2010

Loughs Agency Catchment Status Reports