

Eel Management Plan

IFI- Eel Monitoring Programme

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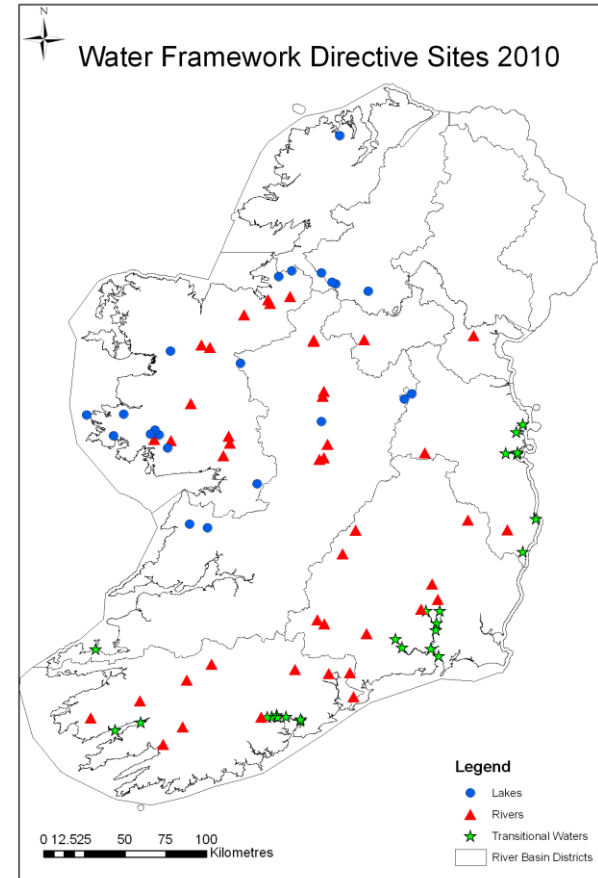
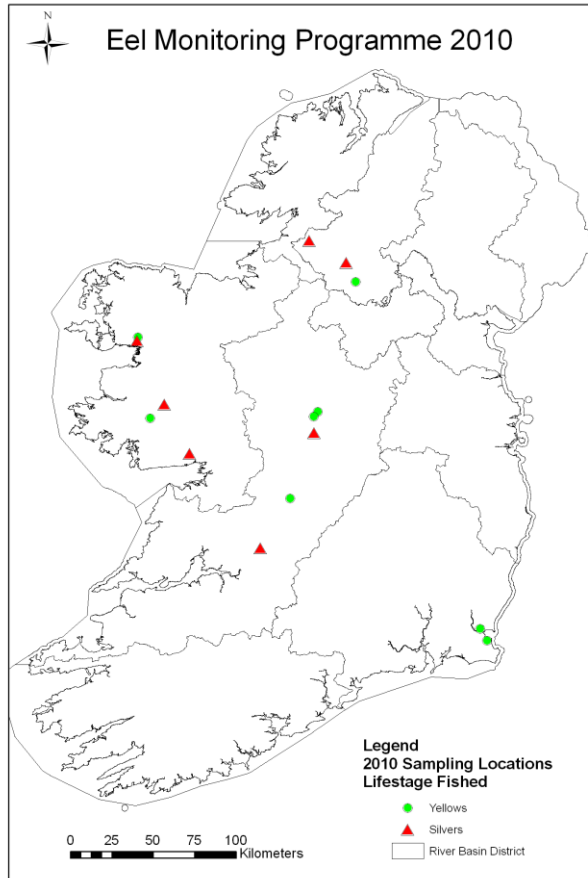
Iascach Intíre Éireann
Inland Fisheries Ireland

Management Plan

- EC Regulation (1100/2007)
 - Member States submit Management Plan
 - Ensure escapement of 40% of pristine silver eel stocks
- Irish National Management Plan
 - Accepted by EU Commission June '09
 - List of Management & Monitoring Objectives



IFI Surveys



National Coverage

WFD

- Lakes 22
- Rivers 43
- T. waters 25

EMP

- 6 lakes
- 2 Transitional waters



Fyke Net Surveys

WFD

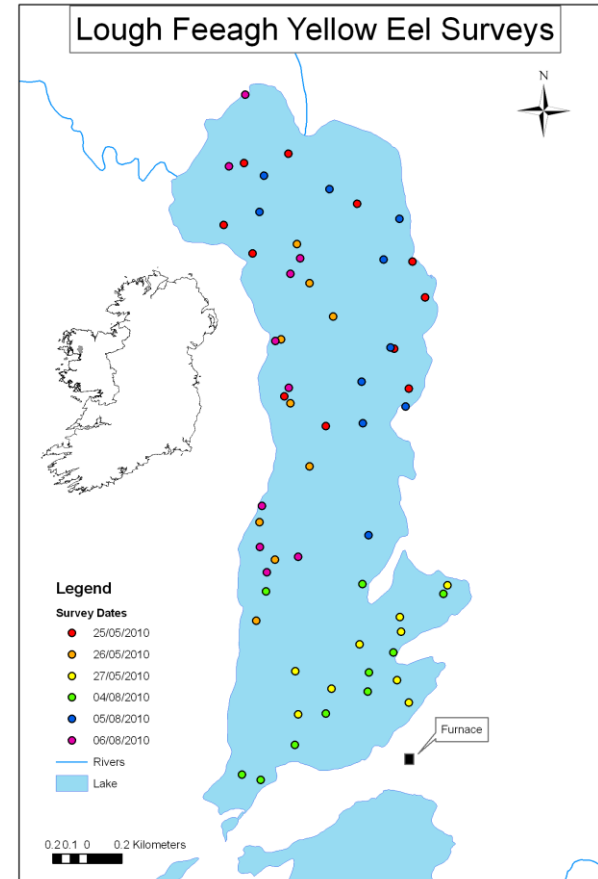
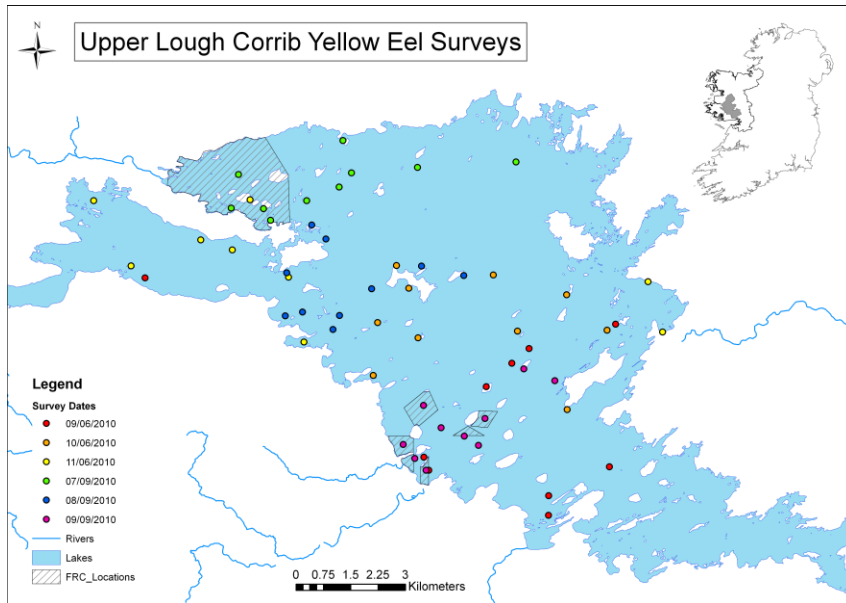
- Chains - 3 fyke nets
- Proportional to wetted area
- Shallow areas around lake
 - Depth 1-6m
- Random location
- Nets perpendicular to shore

EMP

- Chains - 5 fyke nets
- 10 chains * 6 nights
 - 300 net nights
- All areas
- Random Location (Efford 2009)



Intensive Fyke Survey

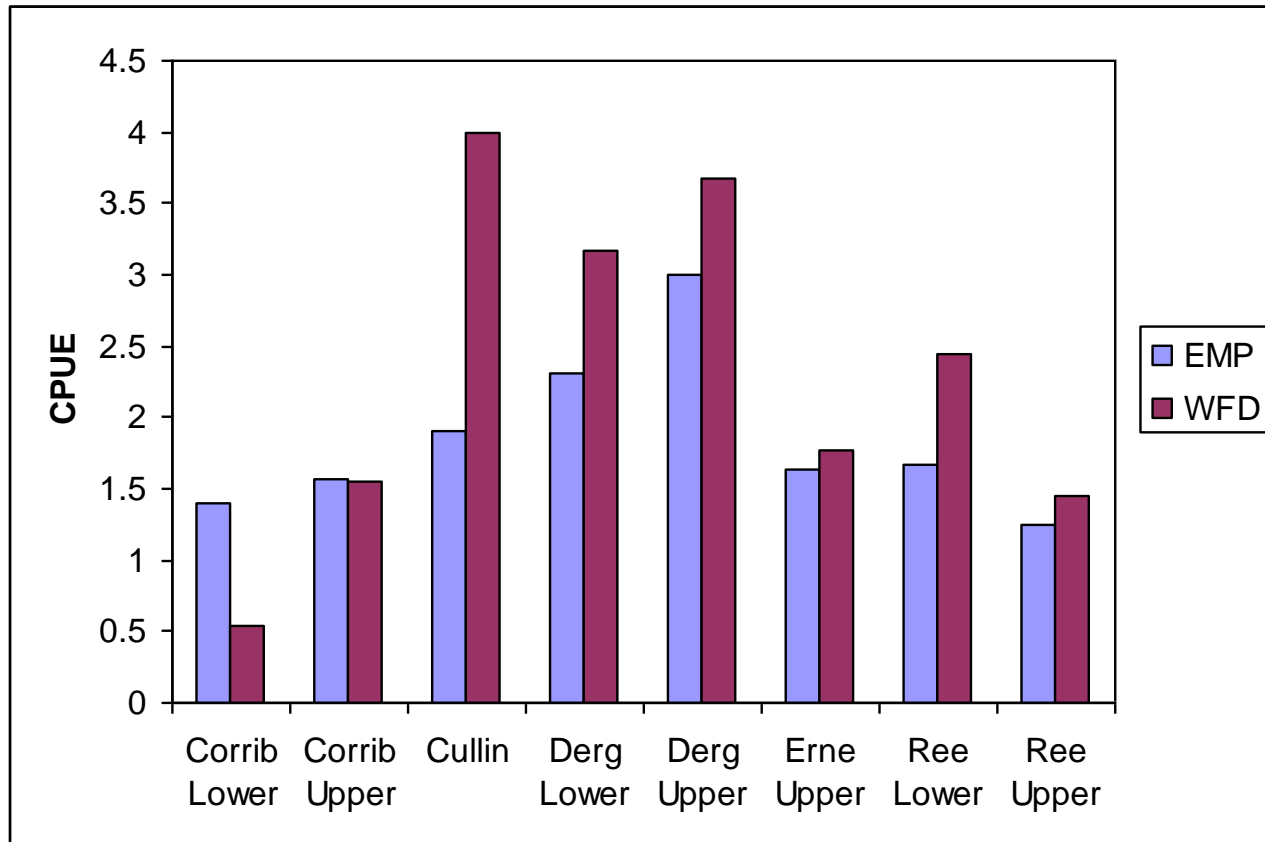


Obj. 4: Intercalibration

- Simultaneous sampling
 - Upr Lough Erne
 - Lough Ree (Upr & Lwr)
- Surveyed within cycle
 - Lough Cullin
 - Upper & Lower L. Corrib
 - Upper & Lower L. Derg



Results



Preliminary Results:

Mann Whitney

- CPUE
 - $p=0.442$ ns
 - Mdn CPUE
 - 1.633 EMP (n=8)
 - 1.778 WFD (n=8)
- Coefficient of Variation (CPUE)
 - $p=0.401$ ns
 - Mdn variance (CV)
 - 1.99 EMP
 - 2.95 WFD
- Weight
 - $p=0.524$ ns
 - Mdn weight (kg)
 - 0.171 EMP (n=1,266)
 - 0.161 WFD (n=128)
- Length
 - $p=0.341$ ns
 - Mdn Length
 - 47.0cm EMP (n=1,266)
 - 45.8cm WFD (n=128)



Preliminary Results:

- No sig. difference in CPUE
- No sig. difference in Coefficient of Variation
- No sig. difference in Length of eels caught
- No sig. difference in Weight of eels caught



Survey Objectives

- National Survey
- Baseline dataset
- Comparison between years – long-term trends
- Examine Stock Structure
- Mark Recapture
- Maturation
- Morphological measurements
- Age, growth



WFD Protocol



EMP Protocol



Next Step

- What do we do with CPUE?
 - Relate to management plans
- 2 year Mark Recapture Experiment in Lough Feeagh
- Meelick Bay (L. Derg)- historical intensive fyke net survey 1981 - 1993
- What about population missed by fykes nets 30 - 40cm; <30cm



Thanks

- WFD Team
 - Taking additional Morphometric measurements
 - Scanning for Tagged eels
- IFI Research Grps
 - Coarse Fish Unit
 - Habitats
 - EREP
- IFI staff around Country

