

Irish Barriers – Identification, mitigations and removals



Brian Coghlan, Alan Cullagh & James J. King

To be or not to be... removed International seminar on dam removal Sweden, 24 – 26 September 2018



An Roinn Tithíochta, Pleanála, Pobail agus Rialtais Áitiúil Department of Housing, Planning, Community and Local Government



lascach Intíre Éireann Inland Fisheries Ireland

Inland Fisheries Ireland

- Inland Fisheries Ireland (IFI) is the state agency responsible for the protection, management and conservation of Ireland's inland fisheries and sea angling resources.
- Fisheries resource = \sum (species + habitats)





1959 Fisheries Consolidation Act

• Section 115 – 125 Dams and Natural Obstructions

(2) Every dam constructed on or after the 10th day of August, 1842,... shall be so built to allow, the migration of all fish at all periods of the year

116 (1) of affording a free and uninterrupted passage to the fish frequenting such river.









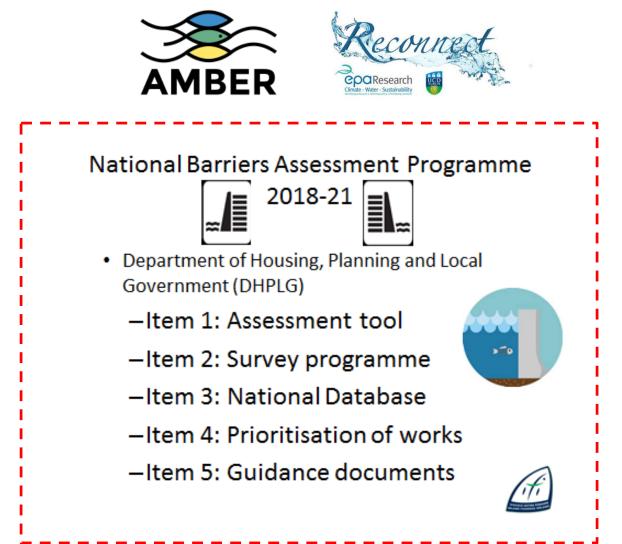


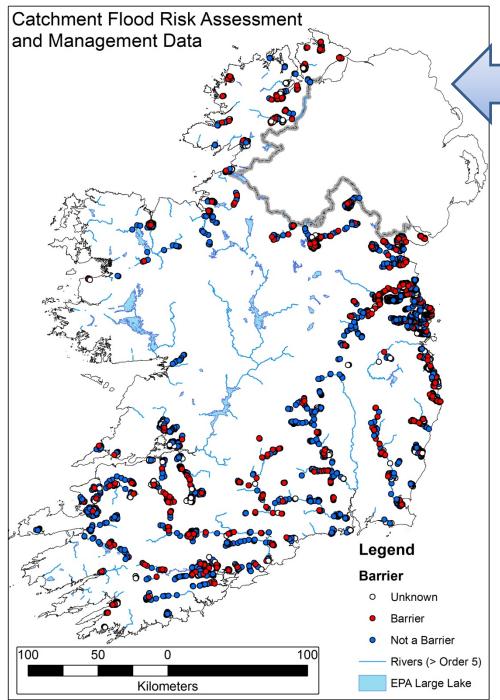
- Status of the Irelands National Barrier Program Identify / Locate / Assess
- 2. Barrier removals/ mitigations
- 3. How are Weir removals/ mitigations considered by the population?
 - Success and Failure.....
- 4. Biological response to simple mitigation



History of barrier mitigation in Ireland

Before 2016 – Regional identification and mitigation of high priority barriers After 2016 - AMBER (EU) / Reconnect (National) Programs





NATIONAL CFRAM PROGRAMME CATCHMENT FLOOD RISK ASSESSMENT AND MANAGEMENT



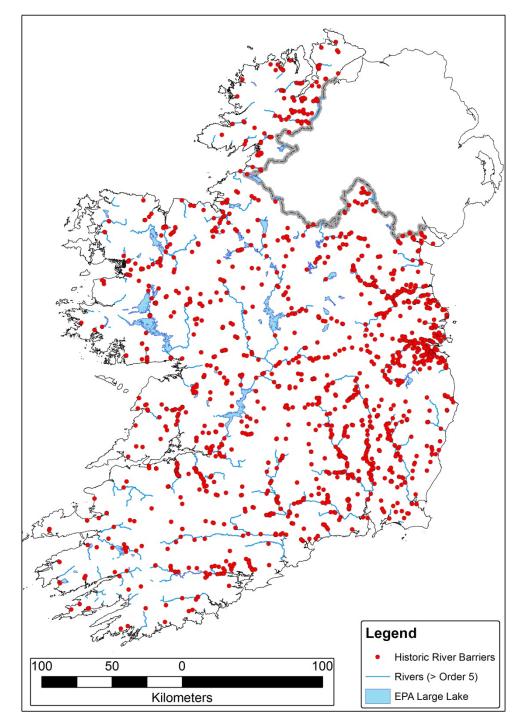






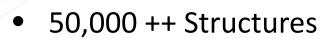
Historic Barriers Layer

- Innovatory of Historic Structures
 - 1830-1890'S
 - Canals
 - Weirs
 - Mills
 - Fords
- ~1700 Structures





Road River Intersections



Progress so far

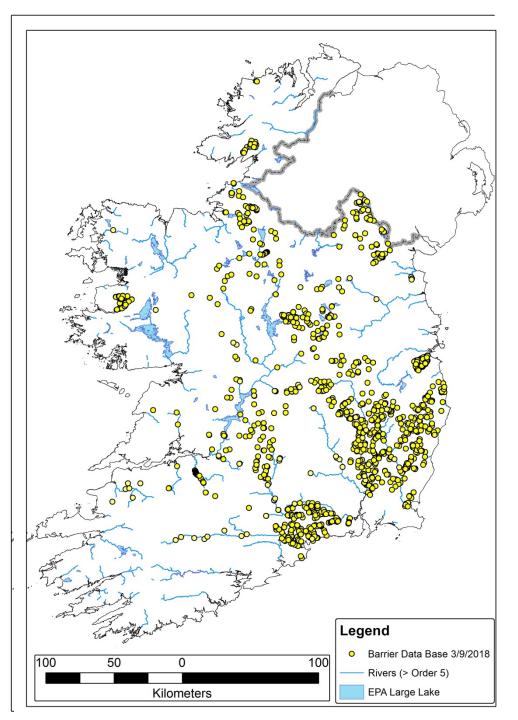
On site surveys

• 1400 Structures

Out of ~ 76,421 Potential



Barriers Iascach Intíre Éireann Inland Fisheries Ireland



Issues and solutions





Weir removal

- Solution fits with WFD
- Removes ponding upstream
- Re-connects river and allows natural flow pattern
- No fish passage issues!!!!



Bridge Mitigation

Clashdog Bridge pre-works



Clashdog Bridge Post mitigation Works

KILKENNY ROCK RAMP – LACKEN WEIR



AMBERing, Going wrong and going right....

Fermoy Weir – Munster Blackwater



- 1. Fish Passage issue
- Remediation Plan issues
- Communication issues
- Perceived Lack of consultation with stakeholders
 - Perception of no choice given

- 1. Fish Passage issue
- Fisheries and community approach
- Consultation with all stakeholders
- Planning permission Approach
- Community led



2018: AMBERing, , going wrong and going right....



- 1. Passage issue eased
- Community Managed Area
- Stakeholders are happy

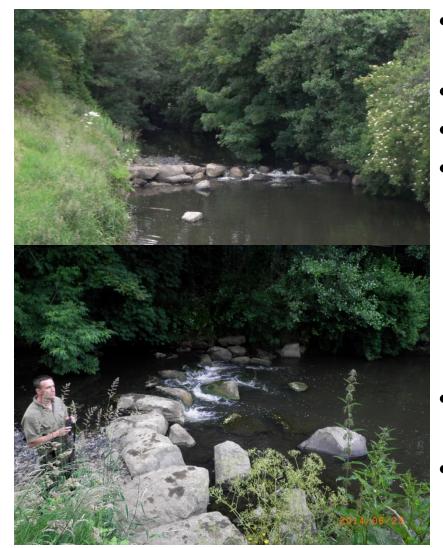


Public perception is more important than construction and <u>more difficult</u> !!

Small, Simple, positive steps.....

Monaghan Blackwater - Weir

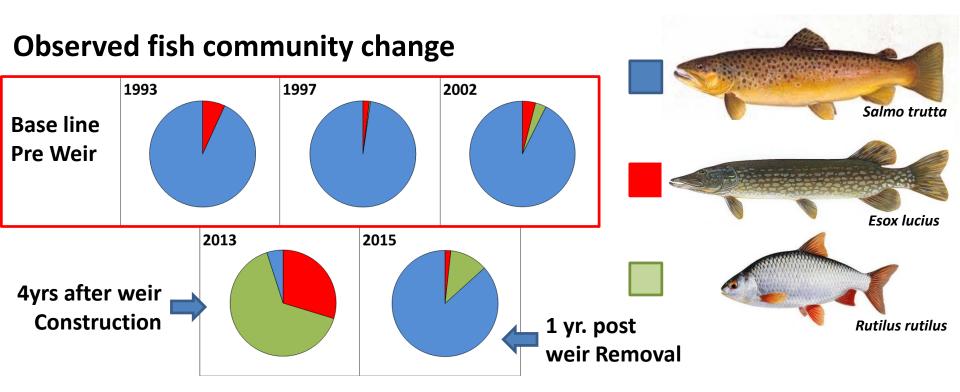




- Built in <u>2009</u> by community group for aesthetic reasons
- Barrier Height = 0.39 m
- Blackwater is a Brown Trout fishery
- The Weir is <u>not</u> a natural Feature



- Survey work indicated Fish community changes
- Developed a works plan with government agencies in conjunction with community group





- Reinstate a more natural flow regime (> Water Velocities, < Depth)
- Community composition restored
- Improved trout numbers
- More visually appealing structure

Small modification making a big difference



