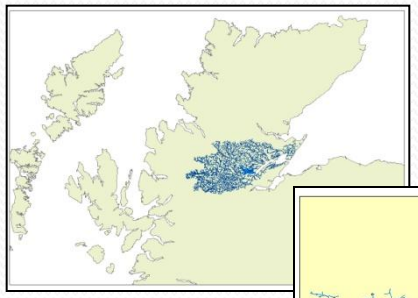
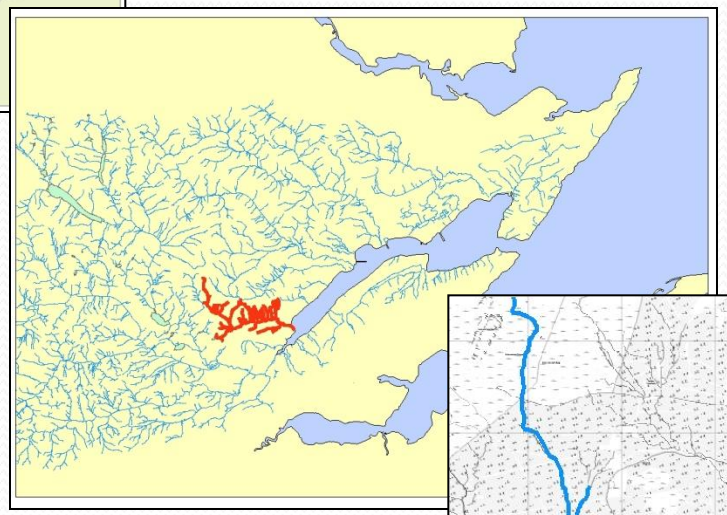
Catchment Scale Restoration on the River Peffery

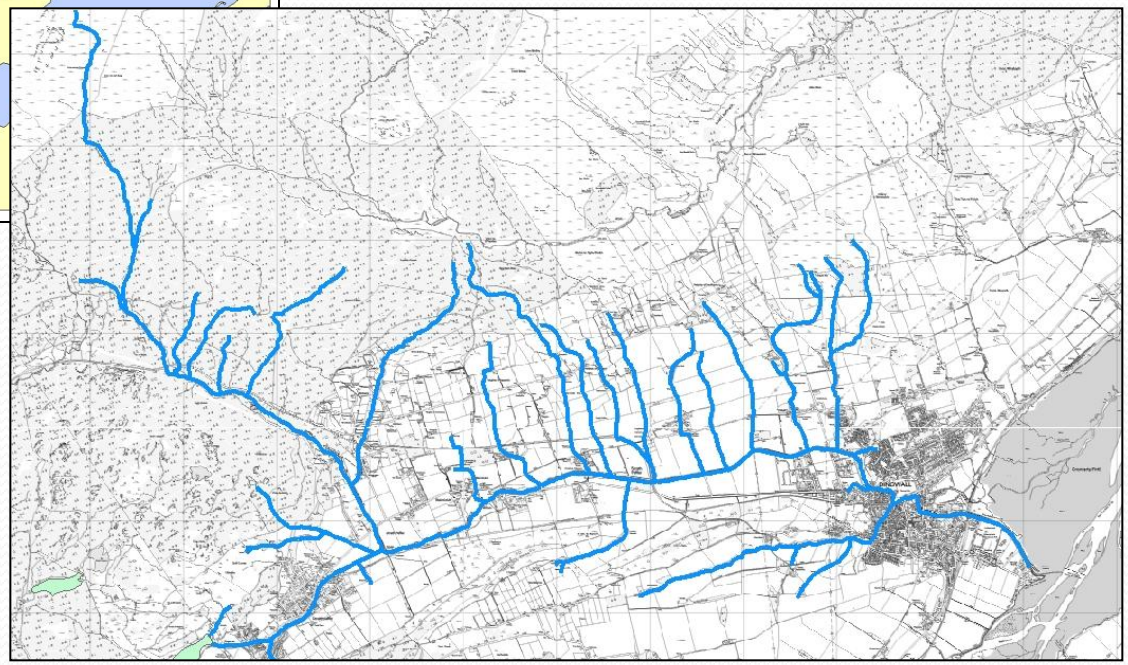
Summary

- Collaborative
- WFD objectives
- Catchment Pressures
- Restoration solutions
  - Forestry
  - Barriers
  - INNS
  - Morphology
  - Amenity

The Peffery







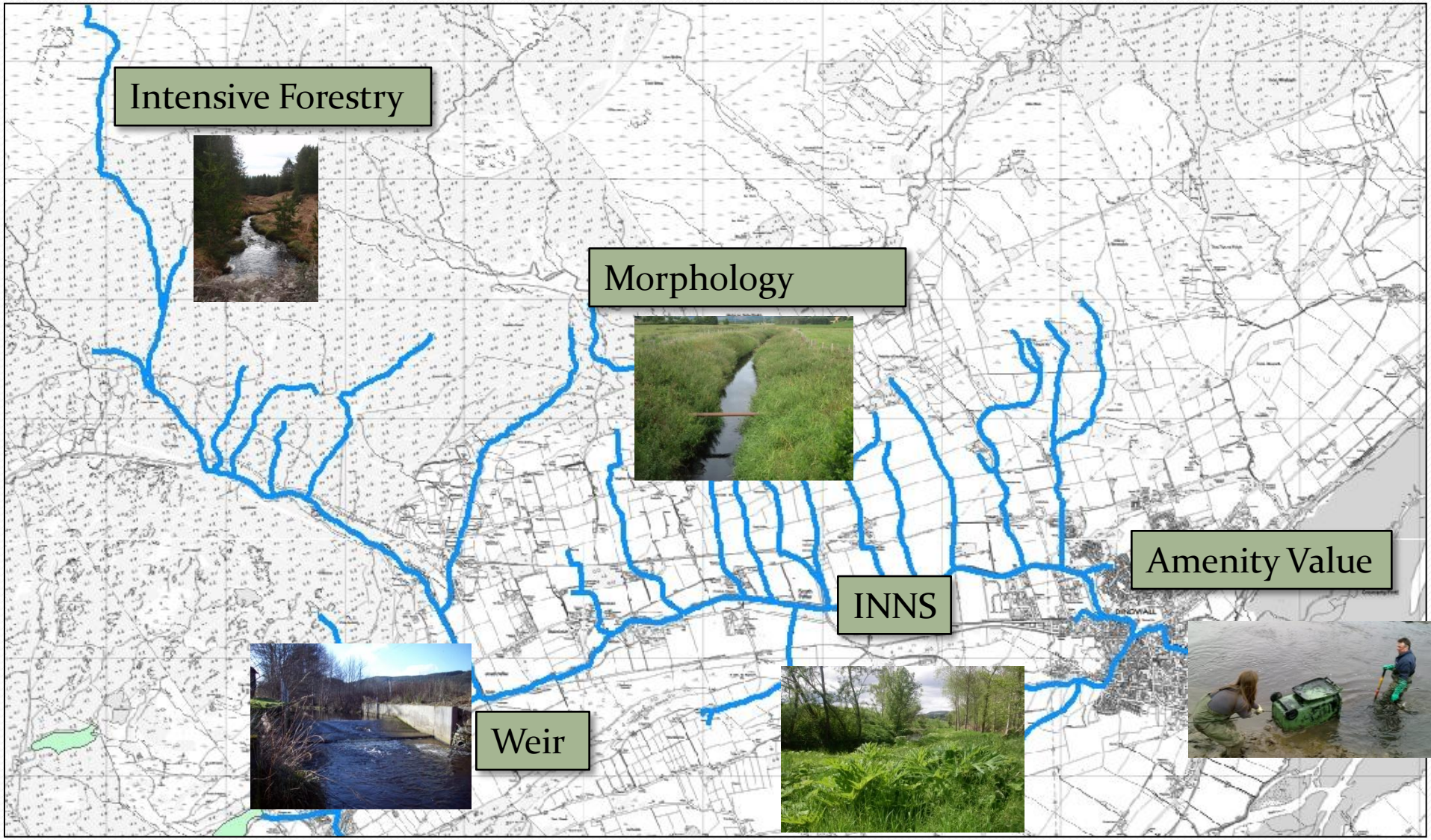
Collaborative

- Delivery:
  - Cromarty Firth Fisheries Trust
  - Cromarty Firth Fishery Board
  - Moray Firth Sea Trout Project
  - Area Advisory Group
  - Scottish Environment Protection Agency
  - Scottish Water
  - Forestry Commission
  - Landowners
  - Local Councillors
- Professional Advice
  - River Restoration Centre
  - Wild Trout Trust
- Volunteers:
  - Dingwall Environment Group
  - Trust for Conservation Volunteers
- Funding
  - Water Environment Fund
  - Moray Firth Partnership
  - Patagonia

Water Framework Directive

- An opportunity for catchment scale management / restoration
- Can be achieved through the Area Advisory Groups (AAG)
  - River Basin Management Planning
- Peffery classified as Moderate (2008)
  - Morphological Alterations
    - Weir
    - Forestry
    - Agriculture – realignment and Channelization

Catchment Pressures



Catchment Pressures

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Forestry Pressures

- Acidic run off
- Source of silt
- Flash flooding
- Limited diversity

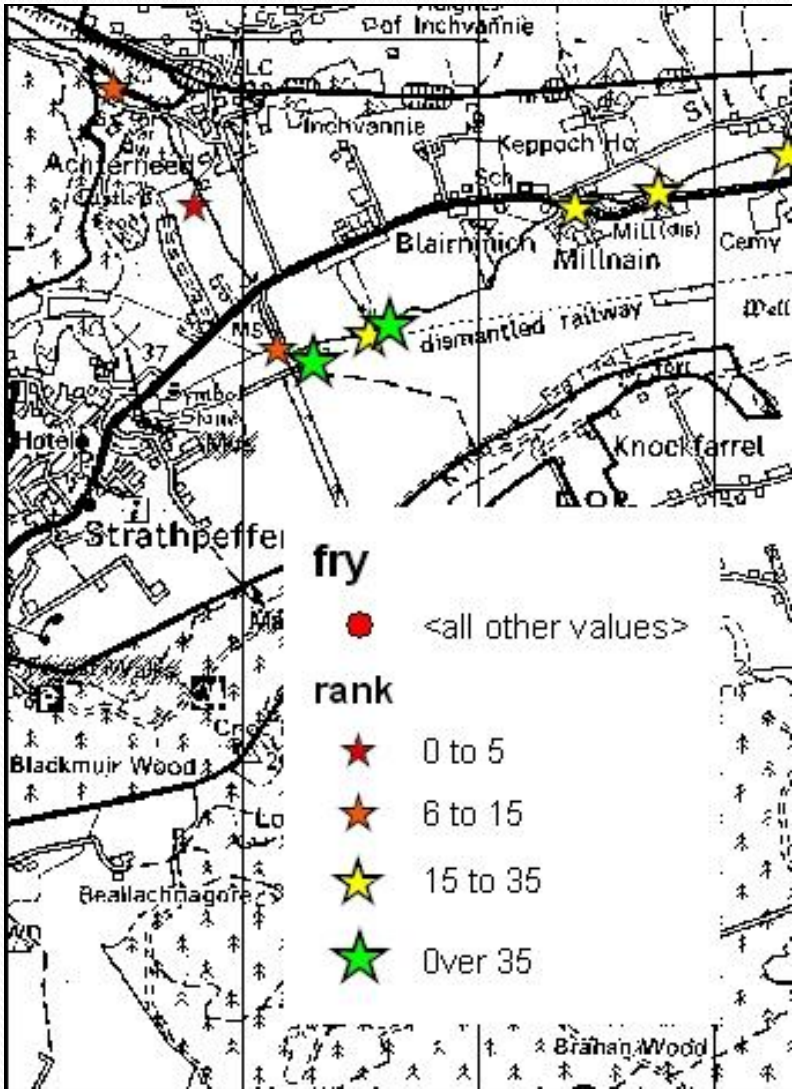
Improved Forestry Management

- Achieved through AAG
  - Riparian planting
  - Blockage of forestry drains
  - Large Woody Debris Trials

Barriers

- Scottish Water gauging weir (sewage works)
- Negotiated via SEPA for barrier easement in 2013

5 Min electrofishing results



Invasive Non Native Species

- Limiting bank side biodiversity
- Reducing amenity value
- Removed as part of larger RAFTS project
- Followed by bank side planting with local willow cuttings and alder saplings

Amenity Value

- Work to improve amenity value in Dingwall
  - Rubbish removal
  - Tree planting
  - INNS Removal

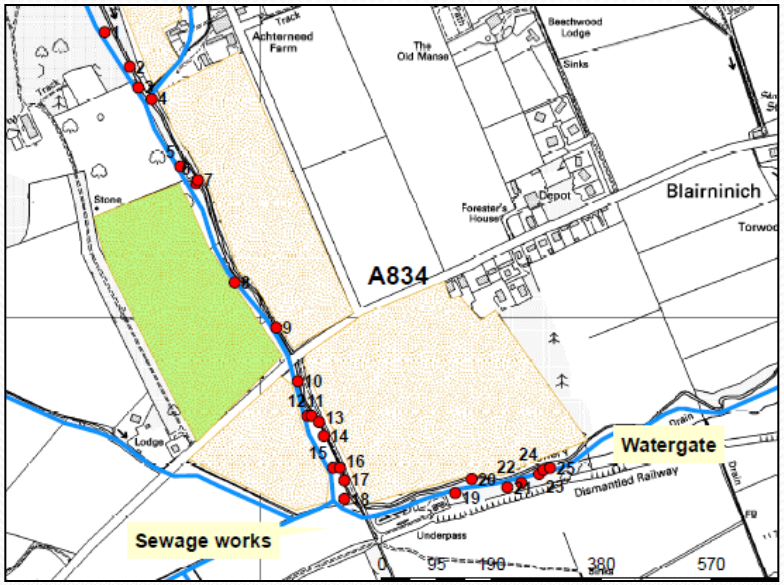
DINGWALL ENVIRONMENT GROUP

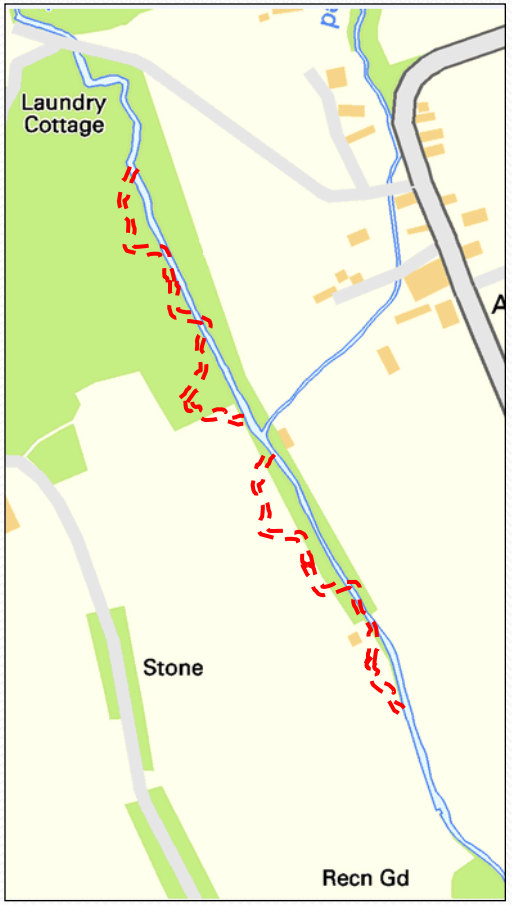
Morphology

- Historically straightened (1740s ?)
- Constrained between flood banks
- Limiting natural river processes
  - Over widened / incised
  - Shallow uniform depth
  - Compacted bed
  - Lacking in stream diversity

In-stream habitat restoration

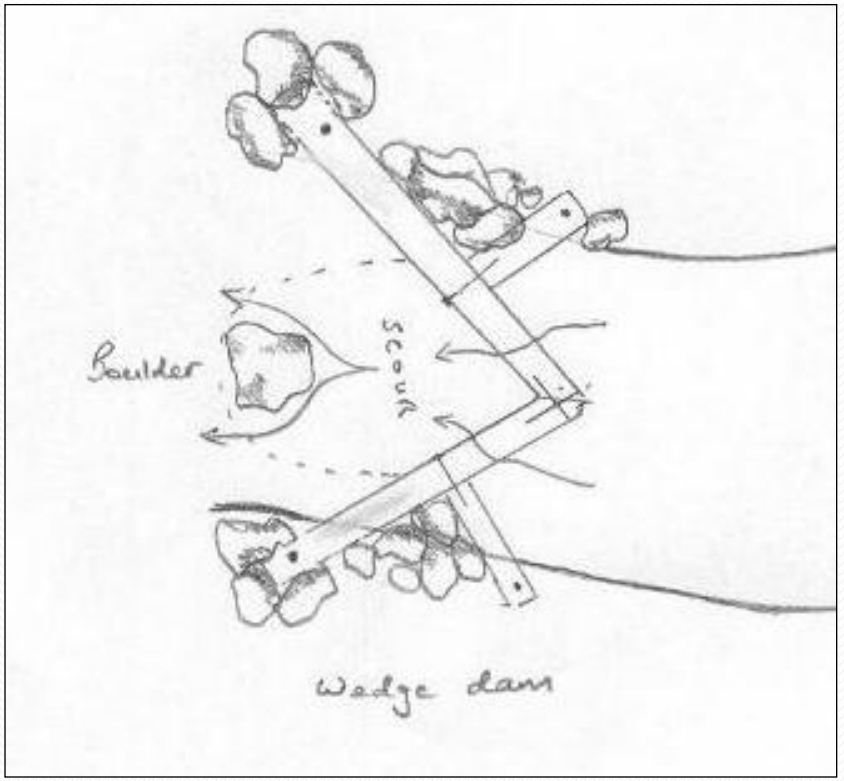
- Options limited by
  - intensive agricultural land use
  - Landowner buy in
  - Perceived risk of flooding





In-stream habitat restoration

- Large Woody Debris (LWD) – perceived flood risk
- Used bed level anchored structures from WTT
  - Local Materials
  - No machinery
  - Don't cause flooding
  - Cheap
  - Installed by volunteers



Peffery Project

- 15 In stream structures
  - 84 pins
  - 33 logs
  - 30 + tonnes of stone??
  - 91 volunteer days
  - 39 staff days

Any Questions?

This project was coordinated, managed and delivered by the Moray Firth Sea Trout Project (MFSTP) and Cromarty Firth Fisheries Board and Trust (CFFB &CFFT) with much of the work done by Dingwall Environment Group and local Trust for Conservation Volunteers. The project was only made possible by funding from The SEPA Environment Fund & Patagonia World Trout Initiative and with the permission to trial these techniques on Cromartie Estates Land.