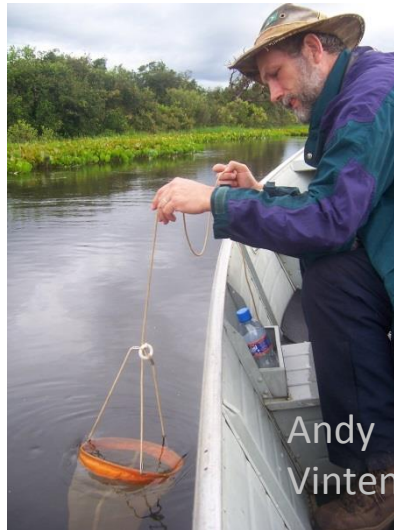



# PESLES\*



\*Payment for Ecosystem Services - Lessons

# *PES definitions*

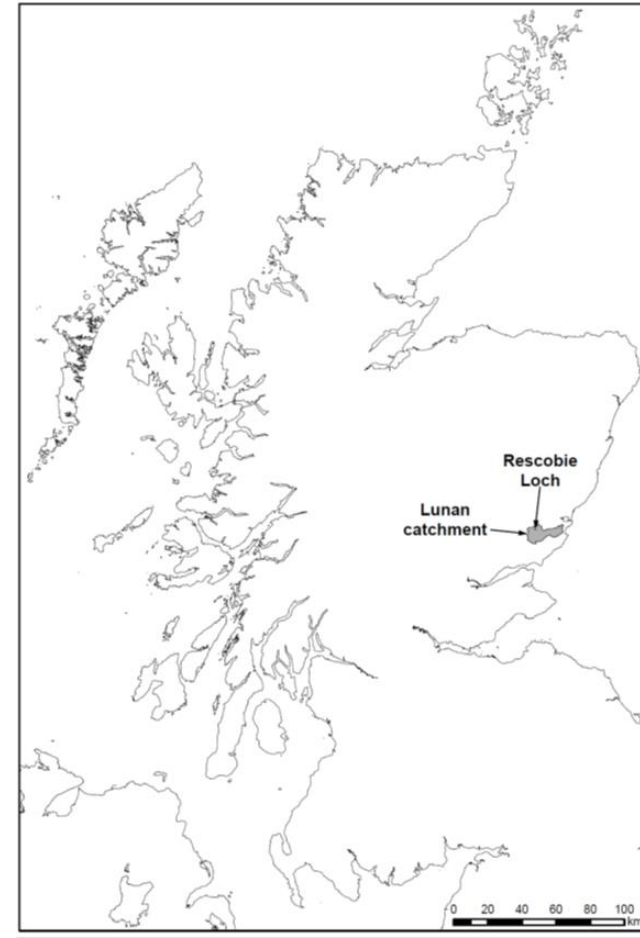
- “incentives offered to farmers or landowners in exchange for managing their land to provide some sort of ecological service”.
-  “a transparent system for the additional provision of environmental services through conditional payments to voluntary providers.”

Tacconi, L. (2012). Redefining payments for environmental services. *Ecological Economics*, 73(1): 29-36



# RESAS funded research

- **Lunan Diffuse Pollution Monitored catchment has been set up to assess the effects of compliance with diffuse pollution regulations and identify cost:effective methods of pollution mitigation**







Swamping of  
Milldens weir



Field flooded  
by Milldens lade



Flooding of boathouse  
at Rescobie Loch





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# PES ideas for the Lunan Water

- Fishing for farmers
- Water for all
- Less erosion
  - less dredging



# Fishing for farmers



Annual agreement exists to lease fishing from riparian owners

Could riparian owners deliver more “ecosystem services”, such as participation in sediment control methods in exchange for this agreement?



Rescobie Loch Development Association  
(fishing club)

Condition in lease?  
Extra payment for sediment control?  
Fishing permits?  
Share of takings?





# Water for all

Public and private local demand for reduction in flood risk and increased water use at low flows; need to conserve wetland ecology.

Water licensing for irrigation is done by SEPA, but WFD status downgraded due to low flows based on weak information on actual usage.

current flow barriers at Guthrie/Milldens are not historic, so modification/removal may not be eligible for Water Environment Fund

Community interest company (CIC) raises local finance for licensing, installation and management of upgrade to hydraulic control systems at current “pinch points”. Upgrade could be programmable tilting weirs, low head hydro, thermal energy recovery (see River Tay)

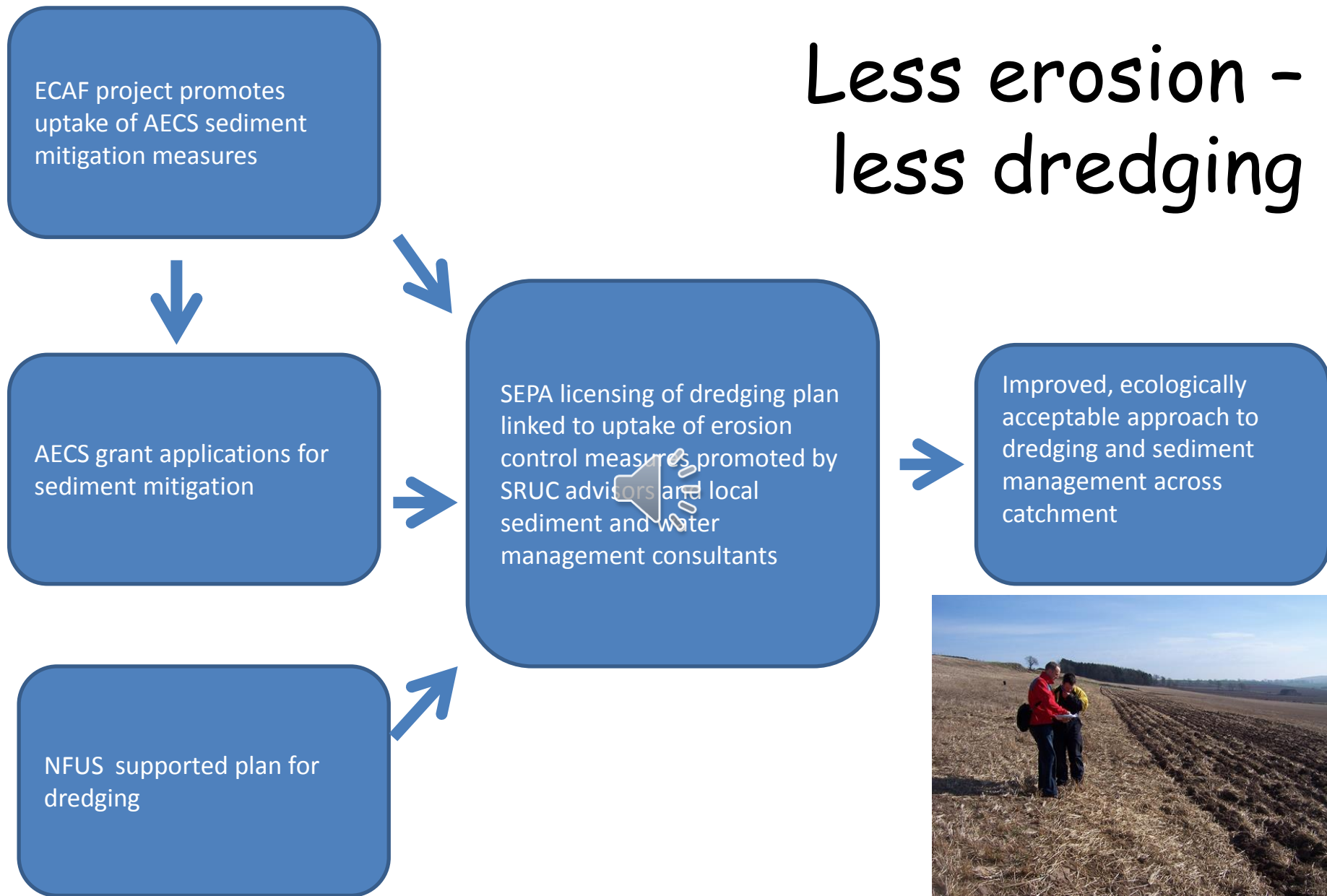
Flexible management regime designed and implemented by consultant /energy company recruited by CIC with local participation



Economic (eg Natural Capital Accounting) assessment of benefits/costs; Appraisal of implementation process



# Less erosion - less dredging



Use cost-effectiveness analysis tools developed by JHI to target measures;  
impact assessment as part of RD 1.2.1 (fine sediment project)