



# Water Quality, Water Quantity & Fish Passage

Dr Lorraine Hawkins  
Dr David Summers



# Water Quality

Land management →

- Silt & soil
- Chemicals – from farms, urban areas, forestry
- Sewage & pharmaceuticals

→ River life

Buffering provided by riparian land filters out diffuse pollutants



# Managing Water Quality

- Work with farmers to make environmental improvements and support AECS grant applications.
- Controlled Activities Regulations (CAR) & General Binding Rules
  - *Require enforcement*
  - *Require monitoring*



# Restoring Water Quality

- Riparian woodland
  - *Protects water quality*
  - *Regulates flows*
  - *Stabilises banks*
  - *Carbon offsetting*
  - *Provides habitat*
- Large Woody Structures
- Nutrients

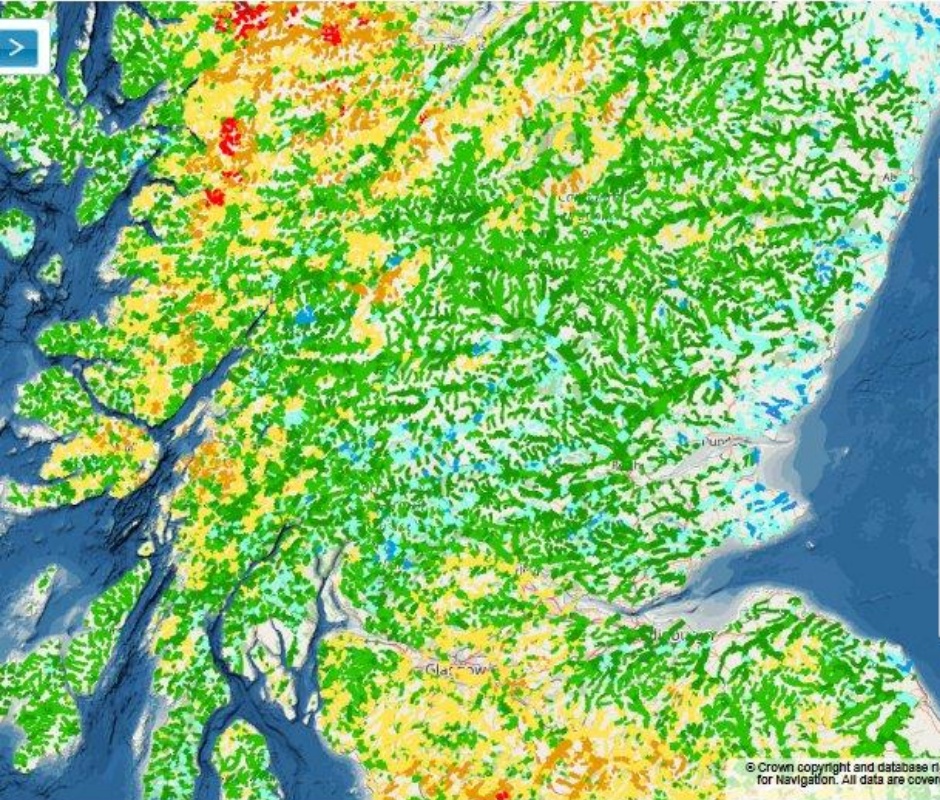


# Future Water Quality

- Climate Change
- Trees - provide shading
- NFM – wetland creation – move past hard engineering

marinescotland MAPS NMPI

Login



Current Map Tool: Pan and Zoom



# Helping our rivers



Enforce legislation

- Land management should not focus on one objective.



Attractive funding packages

- Forestry Grant Schemes
- Favour multiple benefits





# Water quantity and fish passage

# Water Quantity

(Water Abstraction)

- Hydro
- Water supply
- Irrigation
- Fish Farms









# Fish passage

- Adult salmon upstream passage
- Downstream passage of smolts (and kelts)





LD/V06 SWL 15 TORWE



