

Freshwater and The Planning System

chris.cathrine@caledonianconservation.co.uk



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Chris Cathrine

Director, Caledonian Conservation Ltd

Vice Chair, Scottish Wildlife Trust Stirling and Clackmannanshire Local Group

13 December 2022, Online.

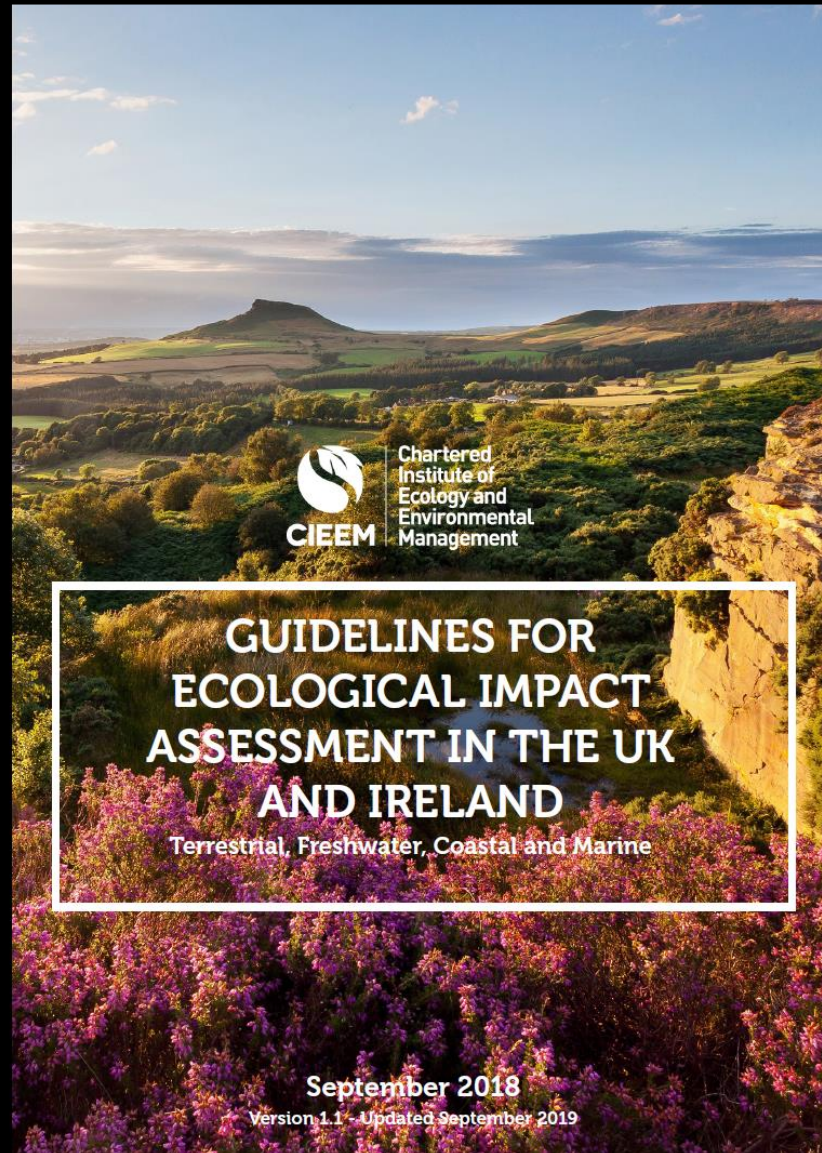
Overview

- Overview of the Planning System
 - Ecological Impact Assessment (EclA)
 - Policy and Legislation
- Ecological Consultant Role
- Freshwater Planning
- Conclusions

Ecological Impact Assessment (EcIA)

- Required by planning regulations
- Allows decision-makers to determine whether a project is in accordance with local or national planning policy
- Allows significant effects to be avoided or reduced to acceptable levels through careful design
- Ensures compliance with relevant legislation

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<https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/>

Environmental Impact Assessment (EIA) Regulations

- Formal EIA required in relation to some development types
- Schedule 1 – EIA is mandatory (eg. nuclear power station, oil refineries, motorways, large waste water treatment plants, airports, pipelines (above certain size), etc)
- Schedule 2 – EIA required if likelihood of significant environmental effects due to nature, size, location, etc (eg. quarries, livestock rearing, overhead power lines, residential developments, wind turbines)



Screening

Need for EIA for Schedule 2 projects is dependent on the likelihood of significant environmental effects

Screening opinion is requested from the relevant Planning Authority

Level of detail in relation to ecology at this stage is often limited (may be based on high level desk study, possibly a site visit)

If a formal EIA is not required PAs are likely to request some level of environmental information in relation to a project to inform planning decisions, e.g. ecology survey report – this will still involve the same EIA principles

Planning Policy - Scotland

- Scottish Planning Policy (SPP)
- National Planning Framework 3: A Plan for Scotland: Ambition, Opportunity, Place
- 2020 Challenge for Scotland's Biodiversity. A Strategy for the conservation and enhancement of biodiversity in Scotland
- Local Plans / Local Development Frameworks
- Community Plans
- General Permitted Development Orders
- Biodiversity Action Plans – UK, Local, Client-specific



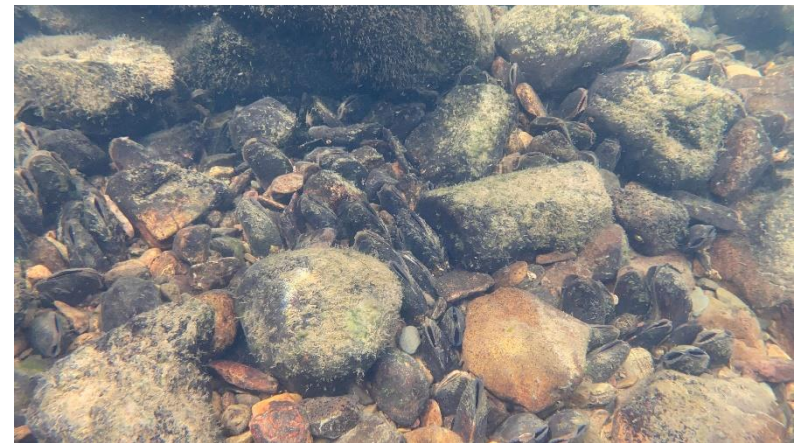
Legislation Overview (Scotland)

- **Wildlife and Countryside Act 1981 (as amended in Scotland)**
 - Designation and protection of SSSIs
 - Protection of other species (note Schedules A1 & 1A in Scotland)
- **Conservation (Natural Habitats, &c.) Regulations 1994 (as amended in Scotland)**
 - Implement the Habitats Directive in Scotland
 - Designation and protection of Natura 2000 sites and protection of EPS
- **Nature Conservation (Scotland) Act 2004**
 - Protection and management of SSSIs
 - Places a 'biodiversity duty' on public bodies to conserve and consider enhancement of biodiversity in all of their actions with regards to Scottish Biodiversity List (SBL) species and habitats
 - Protection of other species
- **Wildlife and Natural Environment (Scotland) Act 2011**
 - Non-native species
 - Amends 'biodiversity duty'
- **Protection of Badgers Act 1992 (as amended in Scotland)**
- **Forestry and Land Management (Scotland) Act 2018**

Protected Species



Protected Species



Protected Species



EIA process

Stage 1 - Screening

- Determination of whether or not an EIA is required
- Consult with the Planning Authority, who will consult statutory consultees

Stage 2 - Scoping

- Determination of what information needs to be covered by an EIA
- Consult with the Planning Authority, but also useful to consult directly with consultees (statutory and non-statutory ideally)

Stage 3 – Impact analysis

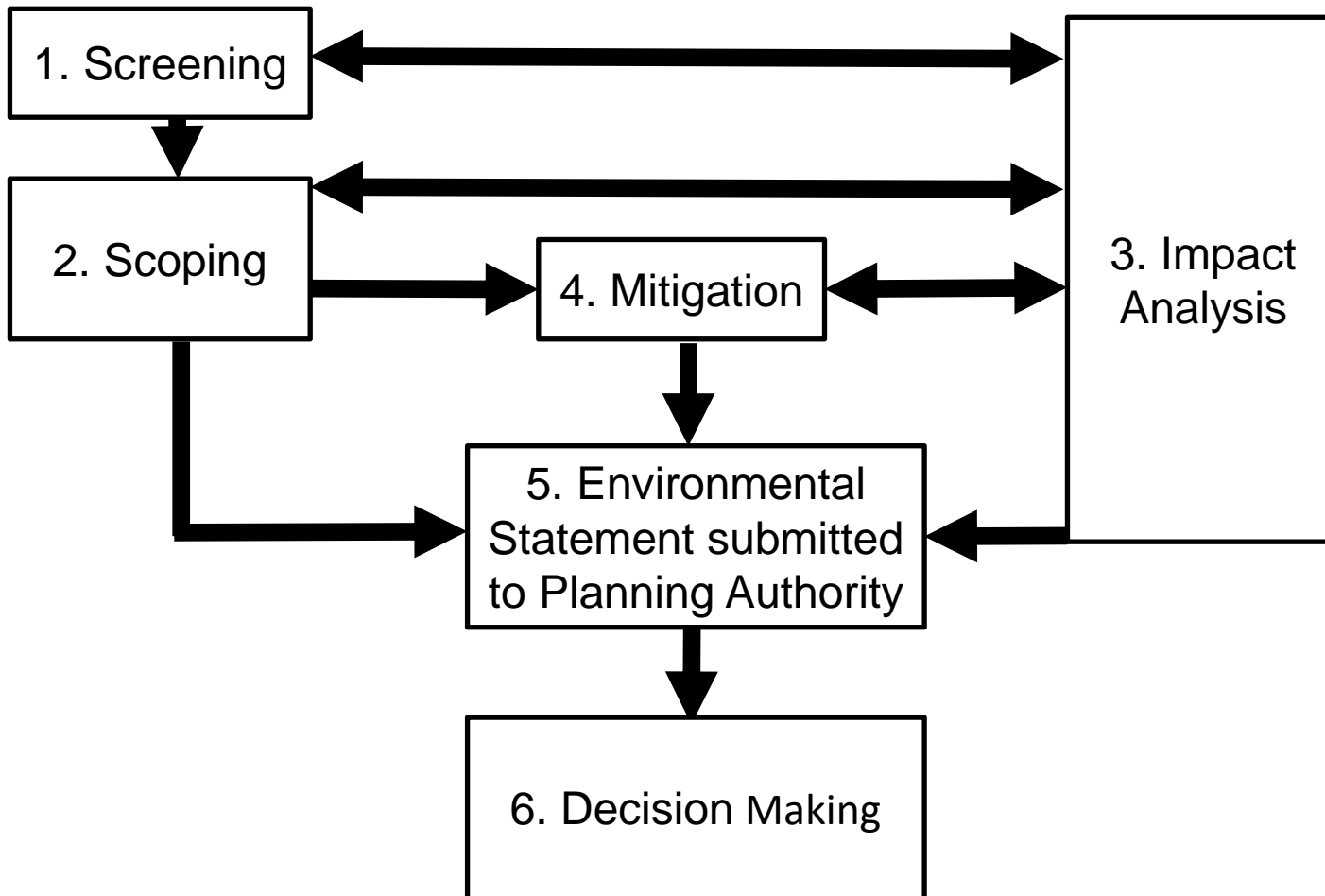
Stage 4 – Mitigation design

Stage 5 – Environmental Statement

- Document with impact assessments for all relevant environmental disciplines
- Public document
- Supported by technical reports and statement outlining expert experience

Stage 6 – Decision-making

EIA process in action (ecology)



Ecological Consultant Role

- Give best possible professional advice in line with current legislation, guidance, and research
- Identify Important Ecological Features and identify Significant Impacts

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Ecological Consultant Role

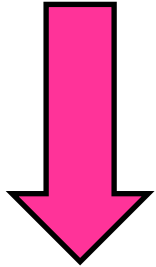
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- Design mitigation and compensation

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- Identify Important Ecological Features and identify Significant Impacts
- Design mitigation and compensation
- **An ecological consultant provides advice and information to inform decision makers**
- **An ecological consultant cannot force anyone to follow their advice and does not make decisions**

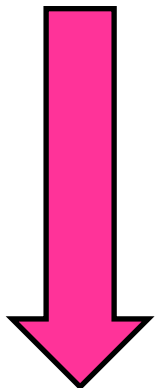
Mitigation

Hierarchy



- Avoid
- Reduce / minimise
- Restore / repair / re-instate / rescue
- Offset / compensate

Mitigation measures need to be realistically achievable and with a **reasonable** degree of certainty of success, because they are:



- Known to be effective, based on past published peer reviewed research
- Relevant approaches recommended by current best practice guidelines
- Intuitively, considered likely to be effective based on an understanding of the relevant ecological processes

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VER	Sensitivity	Potential Effect (before mitigation)	Mitigation	Magnitude (after mitigation)	Reversibility (after mitigation)	Nature (after mitigation)	Significance Level (after mitigation)	Level of Certainty/ Comments and Significance (in terms of EIA regulations)
Freshwater pearl mussels	Very High			No effect pathways during operations				Not significant. High certainty
Alpine ant spider	High			No effect pathways during operations				Not significant. High certainty
Other invertebrates	Low			No effect pathways during operations				Not significant. High certainty
Atlantic salmon	Very High	Run off and pollution	Compliance with legislation, guidance and best practice	Negligible	Reversible in short-term	Negative	Low	Not significant. High certainty
		Disturbance		No effect predicted				Not significant. High certainty
Brown/sea trout	Medium	Run off and pollution	Compliance with legislation, guidance and best practice	Negligible	Reversible in short-term	Negative	Very Low	Not significant. High certainty
		Disturbance		No effect predicted				Not significant. High certainty
European eel	Medium	Run off and pollution	Compliance with legislation, guidance and best practice	Negligible	Reversible in short-term	Negative	Very Low	Not significant. High certainty

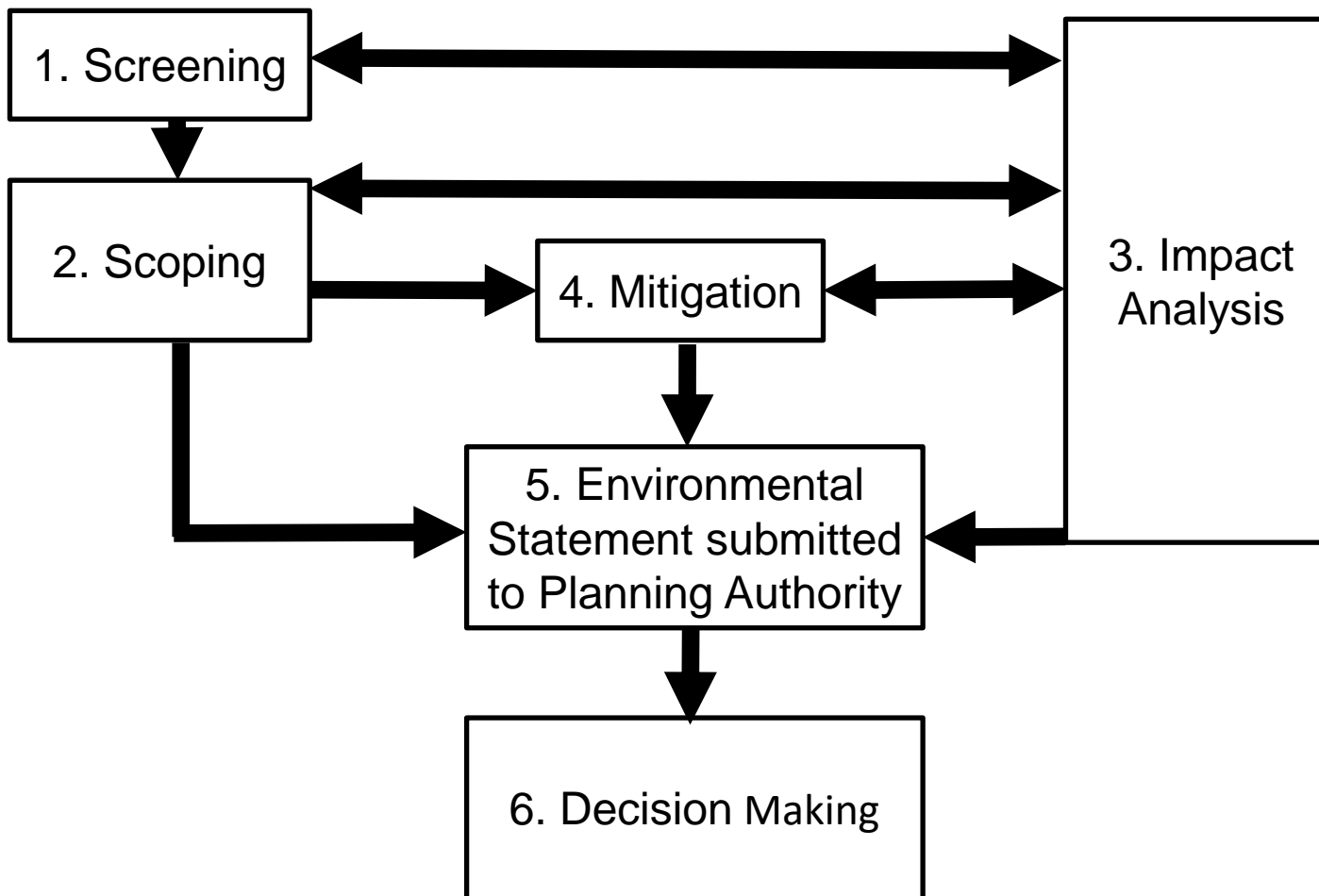
What You Can Do



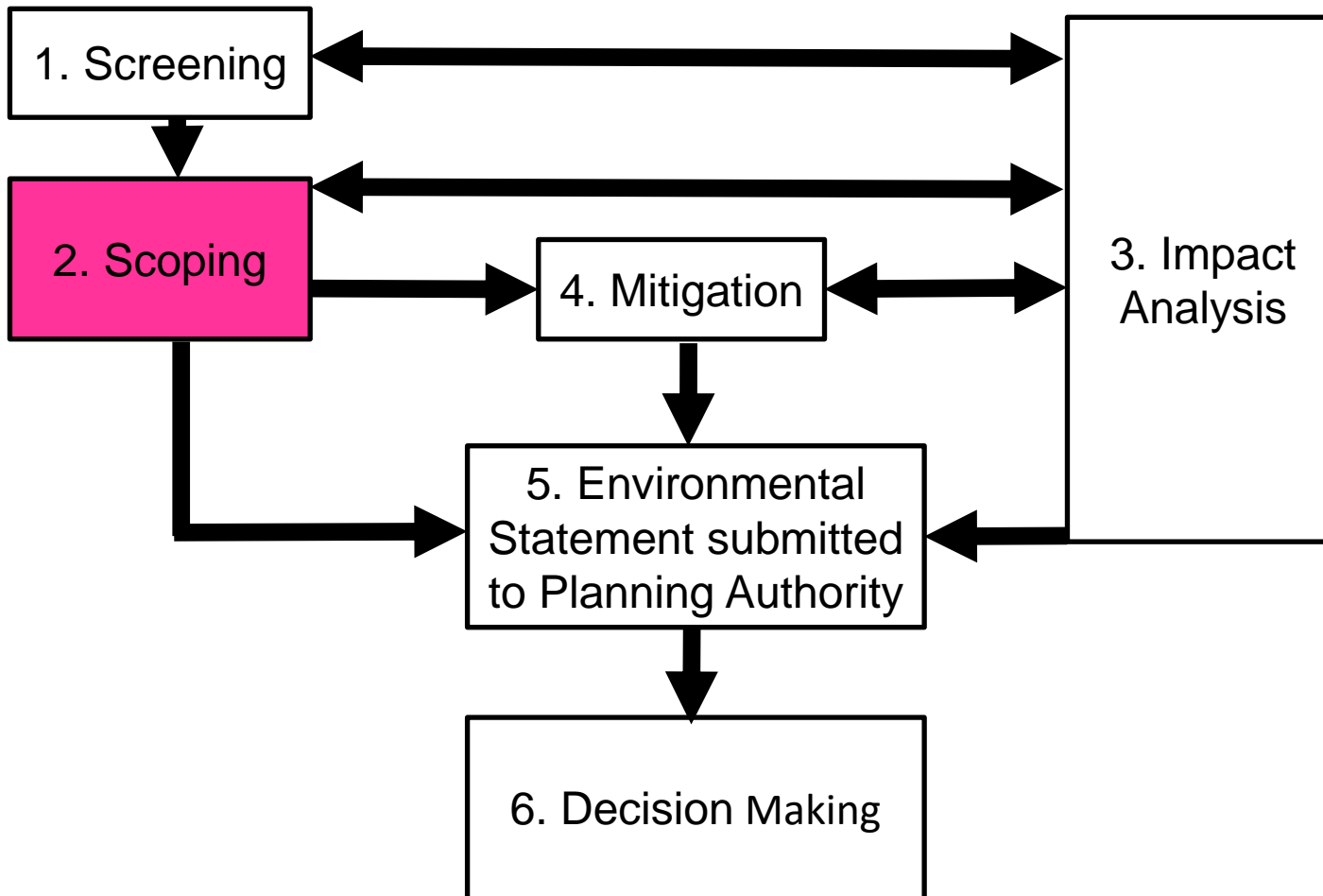
- Get involved in the planning process:
 - Respond as a member of the public
 - Respond as an organisation

- Submit biological records

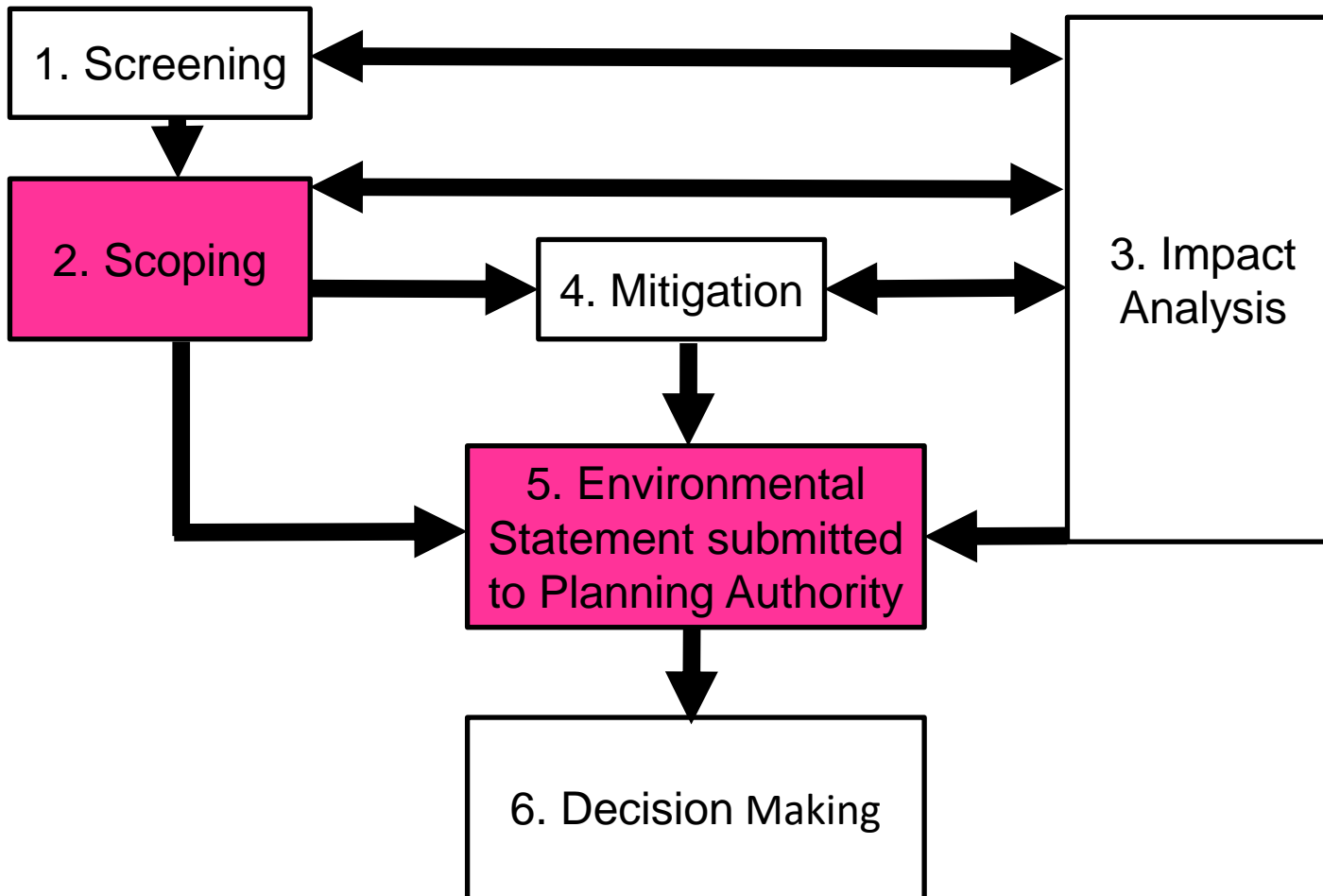
EIA process in action (ecology)



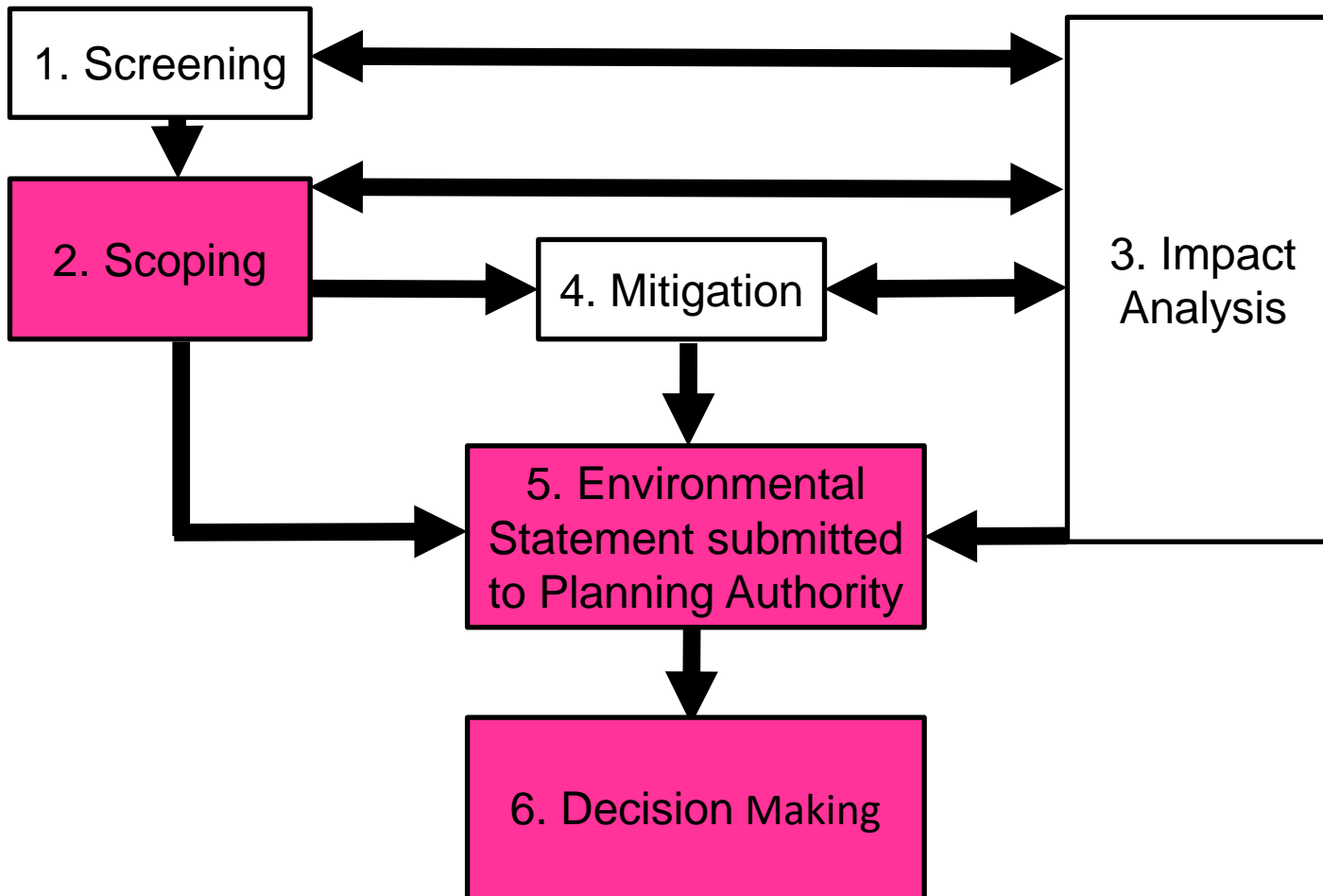
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Legislation

- Water Environment and Water Services (Scotland) Act 2003
- Water Environment (Controlled Activities) (Scotland) Regulations 2011
- Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003, aka the Salmon Act
- The Freshwater Fish Conservation (Prohibition on Fishing for Eels) (Scotland) Regulations 2008

Legislation

- Water Environment and Water Services (Scotland) Act 2003
 - Implements EU Water Framework Directive
 - Covers rivers, lochs, lakes, estuaries, coastal waters and groundwater (including Groundwater Dependent Terrestrial Ecosystems (GWDTEs))
 - River Basement Management Plans
 - Regulatory framework defined in Water Environment (Controlled Activities) (Scotland) Regulations 2011

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 - **River Basement Management Plans**
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Legislation

- Water Environment and Water Services (Scotland) Act 2003
 - **Groundwater Dependent Terrestrial Ecosystems (GWDTEs)**
 - Defined by SNIFFER (based on National Vegetation Classification (NVC) communities)
 - SEPA is the regulator (under Water Environment (Controlled Activities) (Scotland) Regulations 2011)
 - Survey requirements and avoidance buffers:
 - Excavation <1 m deep = 100 m buffer (Phase 1 may be acceptable but NVC preferable)
 - Excavation > 1 m deep = 250 m buffer (NVC required)

Legislation

- Water Environment and Water Services (Scotland) Act 2003
 - **River Basement Management Plans**
 - Responsible Authorities**
 - SEPA
 - NatureScot
 - Scottish Water
 - Forestry and Land Scotland
 - Scottish Canals
 - Local authorities
 - District salmon fishery boards
 - National park authorities

Legislation

- Water Environment and Water Services (Scotland) Act 2003

- **River Basement Management Plans**

Describes

- the current condition of the water bodies in the relevant river basin
- where ongoing or historic activities are reducing the quality of the water bodies
- the actions required to ensure that 'Protected Areas' are up to required standards
- the actions needed to deliver environmental improvements to water bodies over the following 6 years and in the longer-term (up until 2027)

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 - the actions required to ensure that '**Protected Areas**' are up to required standards
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 - Protected Areas are defined as:**
 - Special Areas of Conservation (SACs)
 - Special Protection Areas (SPAs)

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 - **River Basement Management Plans**
 - Protected Areas are defined as:**
 - Special Areas of Conservation (SACs)
 - Special Protection Areas (SPAs)
 - Drinking waters
 - Shellfish waters
 - Bathing waters

Legislation

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Legislation

- Water Environment (Controlled Activities) (Scotland) Regulations 2011
 - CAR
 - SEPA is the regulator

Legislation

- **Water Environment (Controlled Activities) (Scotland) Regulations 2011**

It is an offence to undertake, or cause or permit others to carry on, the following activities without a CAR authorisation:

- any activity liable to cause pollution of the water environment
- abstraction of water from the water environment
- construction or alteration of impounding works (e.g. dams and weirs) in inland water (other than groundwater) or wetlands
- operation of impounding works in surface water or wetlands
- carrying out building or engineering works or works other than those referred to in the two bullet points above in inland water or wetlands or in the vicinity of inland water or wetlands and having or likely to have a significant adverse effect on water environment
- artificial recharge or augmentation of groundwater
- the direct or indirect discharge, and any activity likely to cause a direct or indirect discharge, into groundwater of any pollutant
- any other activity which directly or indirectly has or is likely to have a significant adverse impact on the water environment.

Legislation

- Water Environment (Controlled Activities) (Scotland) Regulations 2011

If any of these activities is already authorised by one of the following environmental regulatory regimes, it will be considered authorised under CAR:

- Radioactive Substances Act 1993
- Integrated Pollution Control (Part 1 of Environmental Protection Act 1990)
- The Pollution Prevention and Control (Scotland) Regulations 2000
- The Pollution Prevention and Control (Scotland) Regulations 2012
- Waste Management Licensing (Part II of Environmental Protection Act 1990)

Legislation

- Water Environment (Controlled Activities) (Scotland) Regulations 2011

CAR levels:

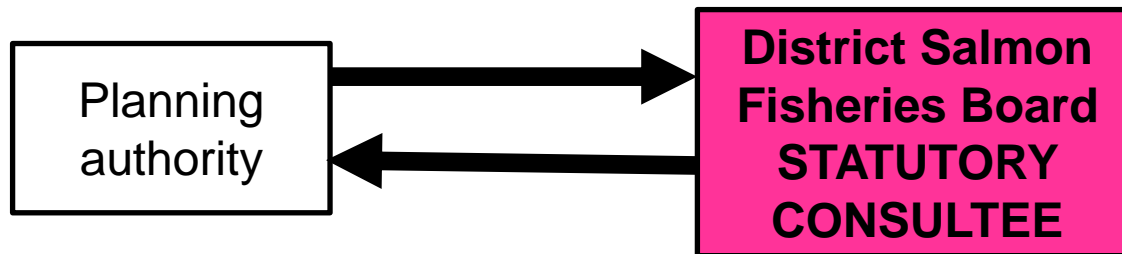
- General Binding Rules (GBRs) (no application necessary)
- Registrations (application to SEPA and one time fee)
 - Small-scale low-risk activities
 - Conditions
- Licenses (application to SEPA and annual fees)
 - Larger, higher-risk, activities
 - Conditions
 - Named licence holder

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 - Fisheries Boards are regulators

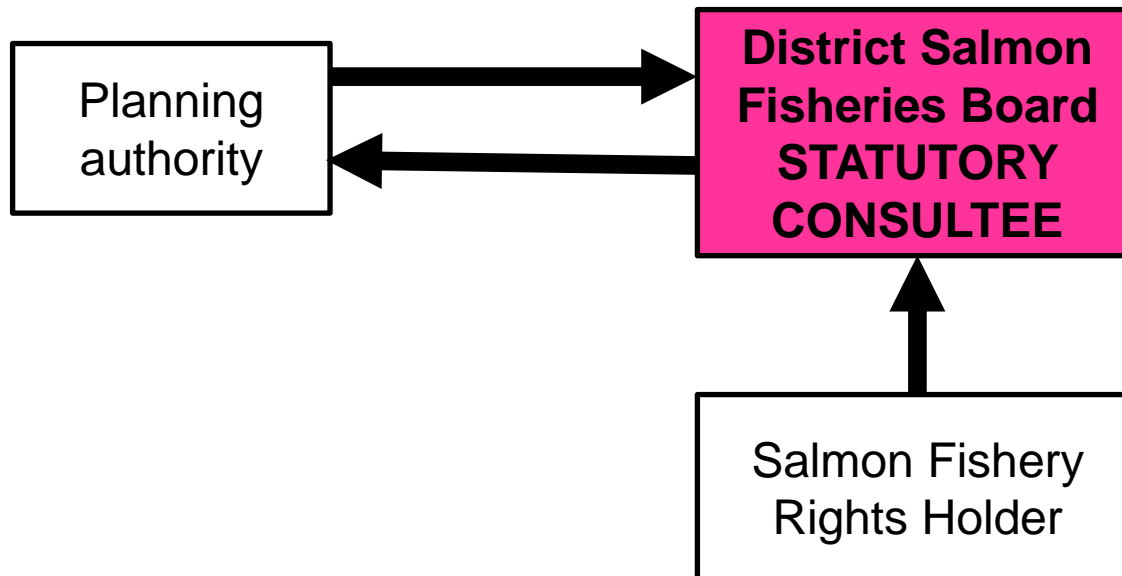
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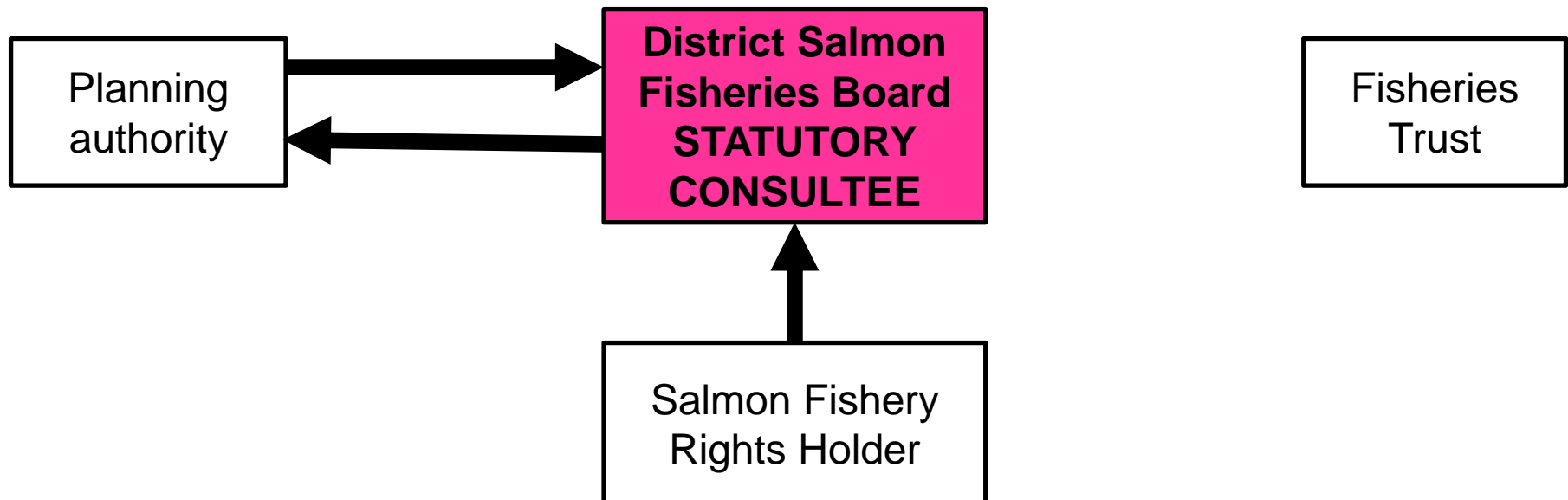
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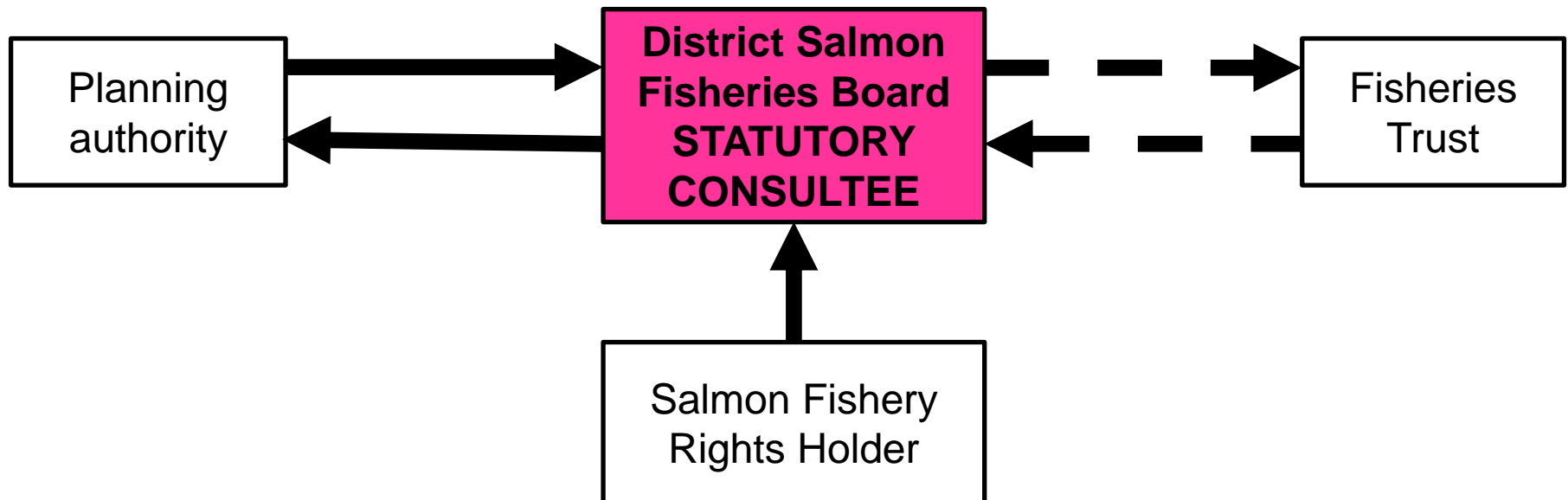
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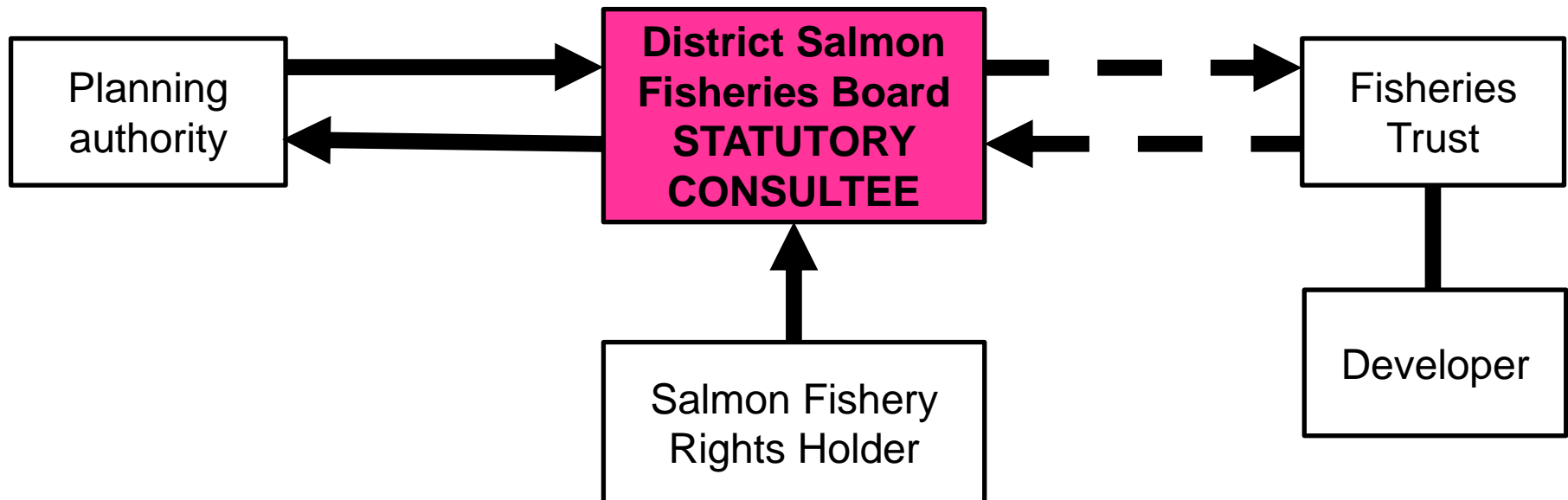
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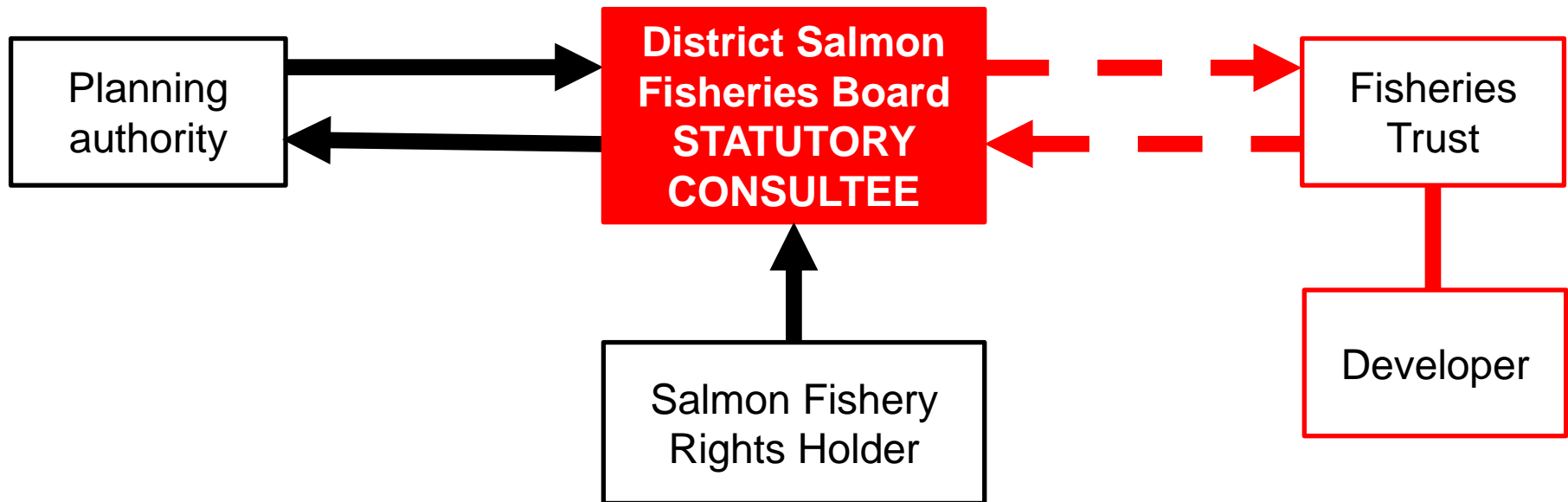
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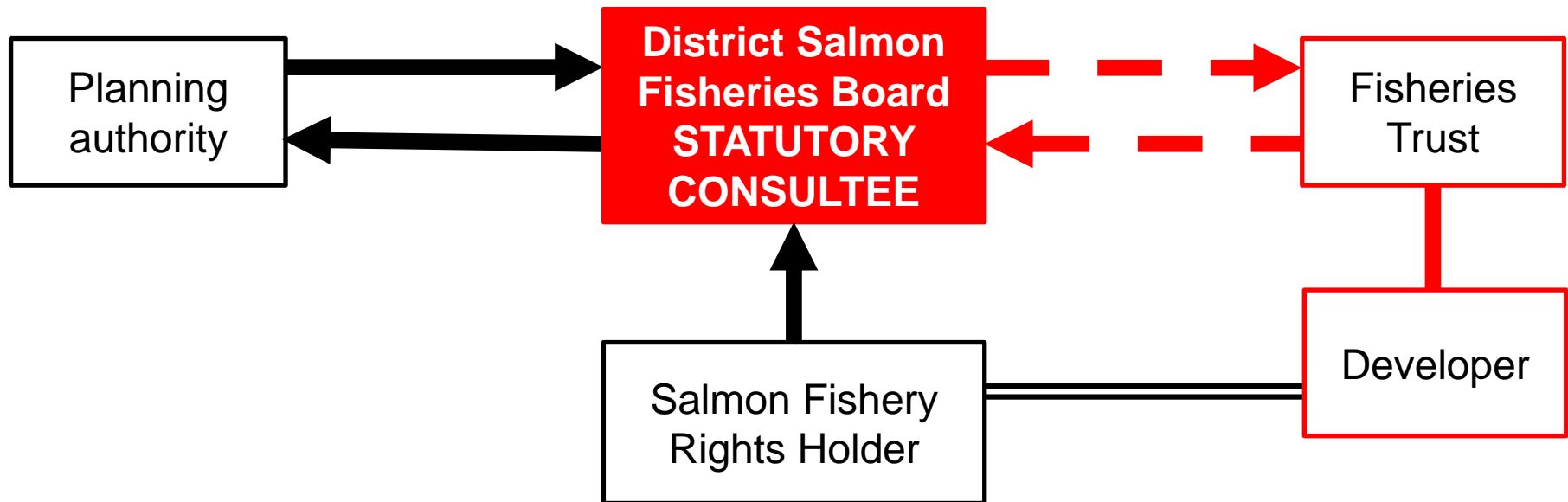
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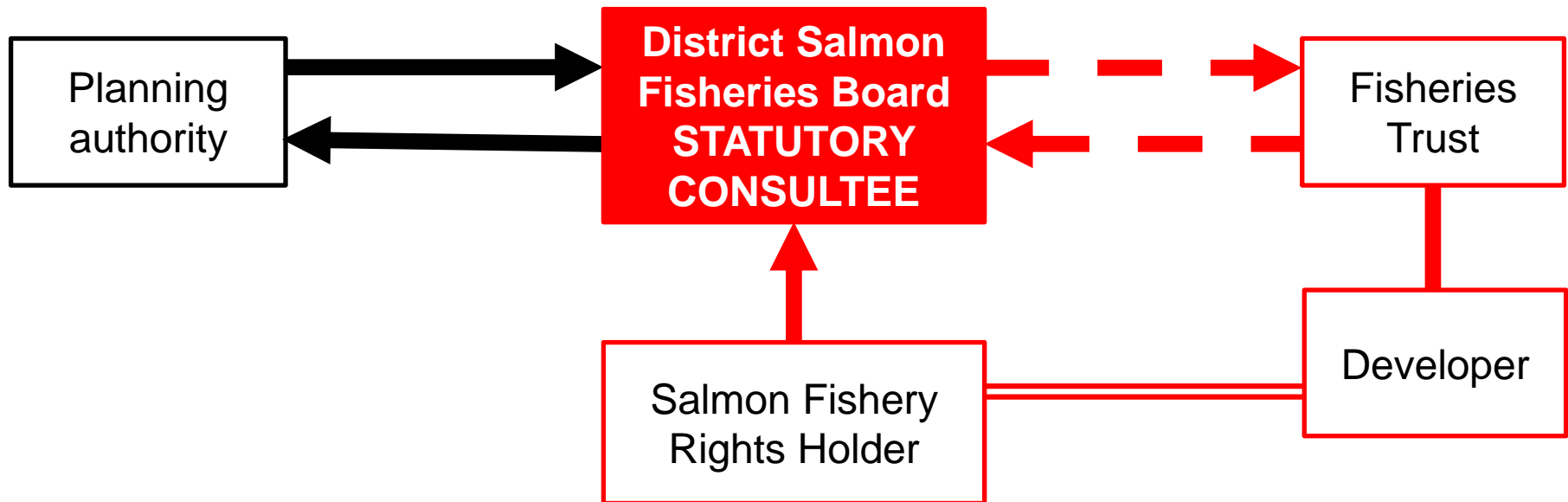
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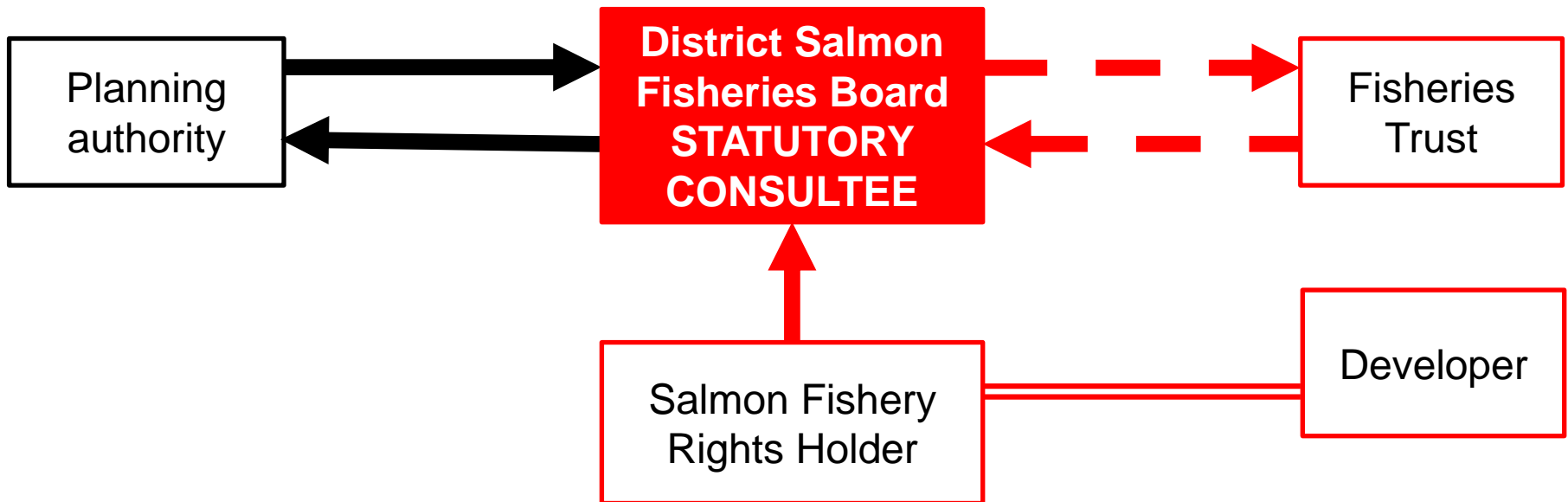
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 - Fisheries Boards are regulators
 - All salmonid spawning habitat protected
 - Access from and to salmonid spawning habitat is protected
 - Other species are protected regarding take only – no application in planning

Legislation

- The Freshwater Fish Conservation (Prohibition on Fishing for Eels) (Scotland) Regulations 2008
 - Relates to take – no application in planning

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Useful Definitions

- When is a watercourse a watercourse?
 - If it is marked on the 1:25,000 scale Ordnance Survey map.
 - A ditch is a watercourse – most ditches were natural streams or burns which have subsequently been modified.
- When is a pond a pond?
 - SEPA definition for Water Framework Directive: manmade or natural waterbody 1 m² to 2 ha, holding water all or some of the time
 - SEPA regulate (under CAR GBRs)

Conclusions

- Focus on protected site connectivity and species which may use freshwater habitats (e.g. freshwater pearl mussel, otter, beaver, water vole, great crested newt, natterjack toad).
- Any potentially impacted watercourse marked on a 1:25,000 scale OS map should be subject to some form of survey to ascertain suitability for salmonid spawning – this habitat is protected.
- Ponds are defined in SEPA guidance written to facilitate implementation of the EU Water Framework Directive and are technically responsible as the regulators under CAR.

Useful Documents

- GWDTE definitions: SNIFFER 2009
<https://www.sniffer.org.uk/Handlers/Download.ashx?IDM=F=a6579282-8428-4282-bfc7-17c7e6027601>
- SEPA Ponds, pools, and lochans guidance
https://www.sepa.org.uk/media/151336/ponds_pools_lochans.pdf
- CIRIA SuDS Manual
<https://www.ciria.org/ItemDetail?iProductCode=C753F&Category=FREEPUBS>
- RSPB and WWT SuDS Best Practice
<https://www.rspb.org.uk/globalassets/downloads/documents/positions/planning/sustainable-drainage-systems.pdf>

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Chris Cathrine (Director)

Caledonian Conservation Ltd

chris.cathrine@caledonianconservation.co.uk

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