



# **Why monitoring matters: the legal and professional context for effective mitigation monitoring**

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*Habitats Regulations Assessment Handbook and Journal*

# OBJECTIVES

- **Provide legal and professional context for effective mitigation monitoring, and why it is important**
- **Offer definitions and explanations for mitigation monitoring**
- **Focus on European Directives: EC Directives (up to 2009 when Lisbon Treaty established EU as a legal entity) and EU Directives (from 2009)**

# MITIGATION DEFINED

- **Mitigation means measures taken to avoid or reduce negative impacts or effects**
- **Originally used in EIA in its strict sense of reducing impacts or effects**
- **Now used in wider sense embracing avoidance, cancellation and reduction of impacts (e.g. in EC guidance)**
- **‘Embedded’, ‘incorporated’ or ‘design’ mitigation should be included in project proposal**
- **‘Non-embedded’ or ‘additional’ mitigation may be imposed by regulator e.g through conditions**

# MITIGATION HIERARCHY

- **Hierarchy first published by RTPI in 1999**
- **Now mitigation, compensation and enhancement measures are usually referred to in these terms:**

Avoidance / protection / preventative	Generic 'mitigation'	All measures required to achieve 'no net loss' and 'net gain'
Reduction / minimisation / mitigation		
Cancellation		
Compensation / offsetting		
New or net benefit, enhancement		

## EXAMPLE: CIEEM EcIA Guidelines 2016

- **Avoid impacts where possible**
- Reduce / minimise negative impacts
- **Consider alternatives (avoidance & minimisation)**
- Consider efficacy and implications of mitigation measures
- **Embed mitigation into design and proposals**
- Compensation for unavoidable harm – prioritise equivalent ecological functionality
- **Consider biodiversity offsets to help no net loss**
- Enhancement - an objective for all projects - national policies for net gain (e.g. NPPF in England, Policy 109)

# MONITORING DEFINED

- *‘To observe and check progress or quality of something over a period of time’ (OED)*
- **Identify where required\***
- **Clear purpose / objective / criteria for success / failure**
- **Include in conditions or legal agreements**
- **Method statement / specification**
- **Programme / timing & frequency**
- **Recording / reporting & disseminating**
- **Procedure / protocol acting on interim / final results – remedial measures**
- **\*Depends on confidence / certainty, most needed where measures uncertain or novel**

# TYPES OF MONITORING 1

- **Compliance monitoring. Fully implemented? Timely?**
  - Tells nothing about success or effectiveness
- **Validation monitoring. Successful? Objectives met?**
  - Useful if likely to be repeated – gives confidence
  - But may not lead to remedial measures
- **Early warning monitoring – indicates if measures may not work before harm occurs**
  - Triggers planned different or additional measures
  - Particularly useful in HRA - precautionary principle
  - Must include detailed programme of alternatives and remedial actions

## TYPES OF MONITORING 2

- **‘Adaptive management’ as part of a mitigation and monitoring package**
  - Large scale, long duration, novel or unpredictable situations where measures may need to be adapted over time
  - Need especially clear and enforceable protocols
- Unless outcomes are certain, we should ensure adequate procedures in place for alternative, additional or different measures to be triggered at the right time to improve success



# HISTORICAL OVERVIEW OF MONITORING

- **Poor or absent in most EclAs and EIA**
- **Not required for EIA until 2014**
- Required for Environmental Reports in SEA since 2004
- But report to EU in May 2017 - poor monitoring and poor monitoring of monitoring!
- Too often monitoring relies on generic indicators and targets that do not actually measure environmental performance of planned mitigation
- Had we monitored better: would have improved understanding of effectiveness of mitigation
- **WOULD NOW BE LESS UNCERTAINTY, LESS REGULATION, QUICKER DECISIONS AND LOWER COSTS**

# WHY MITIGATION MONITORING IS IMPORTANT

- **Professionally**
  - for sustainable ecosystems and services
  - complying with good practice standards
- **Financially**
  - avoids over-provision of expensive mitigation
  - avoids excessive demands from regulators
  - provides sound evidence for future cost effective mitigation
- **Efficiency**
  - speeds up design, approval, and construction processes; leads to more effective operation
  - may allow ECoW or project Ecologists to adapt construction to achieve mitigation objectives
- **Legally**
  - failure to appreciate legal context can lead to legal challenges
    - very expensive, time consuming and uncertain

# CURRENT LEGAL REQUIREMENTS FOR MITIGATION

- **Environmental Assessment Directives:**
- **All require mitigation measures to be included in Environmental Impact Statements (EIA) and Environmental Reports (SEA)**
- **Typically: ‘incorporate description of measures to avoid, prevent or reduce and, if possible, offset significant adverse effects on environment’**
- **Also require measures to make sure they are implemented**
- **Regulators can add mitigation measures by conditions even where no formal EIA required**

# CURRENT LEGAL REQUIREMENTS EIA MONITORING

- **EIA Directive as amended:**
- **Consent must incorporate, where appropriate, monitoring measures (Article 8a(1)(b), 2014/52/EU)**
- **Member States shall determine procedures regarding monitoring of significant adverse effects on environment**
- **Type of parameters & duration of monitoring proportionate to nature, location and size of project and significance of effects**
- **Existing monitoring arrangements resulting from other EU and national legislation may be used if appropriate, to avoid duplication (Article 8a(4))**

# CURRENT LEGAL REQUIREMENTS SEA MONITORING

- **SEA Directive / Regulations Article 10:**
- **1. Member States shall monitor effects of implementation of plans and programmes to identify at an early stage unforeseen adverse effects, and to undertake appropriate remedial action**
- **2. Existing monitoring arrangements may be used if appropriate, to avoid duplication**
- **Article 5.1 and Annex 1 Environmental Reports must include:**
- **(i) a description of monitoring measures in accordance with Article 10**

## CURRENT LEGAL REQUIREMENTS HRA MONITORING

- **Nature Directives contain no legal requirements but EC guidance emphasises importance of monitoring**
- **Case law indicates validation monitoring is not sufficient to comply with the precautionary principle but early warning monitoring can be**

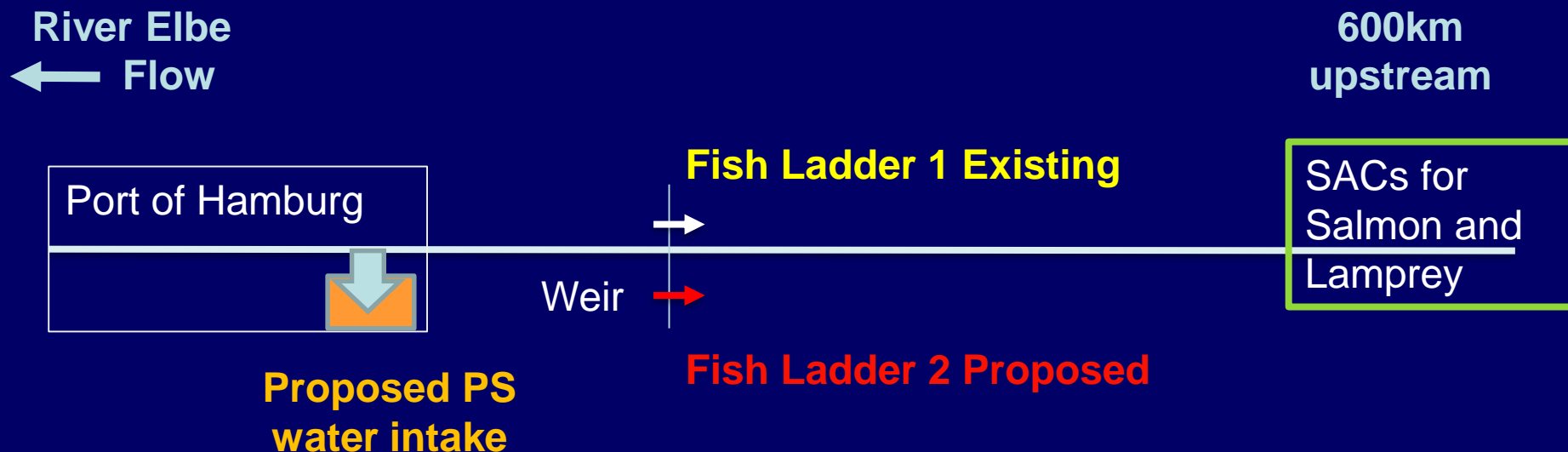
# CURRENT LEGAL REQUIREMENTS FOR MONITORING:

## General planning

- **Sporadically proposed in applications**
- **Will increasingly become an expectation for planning and development consents**
- **Infrequently (so far) imposed as a condition in regulatory procedures e.g. planning or development consents because regulator has to show 'necessity'**
- **Therefore, important to embed in application proposals to give regulator confidence**

# INADEQUATE MONITORING LEGALLY CHALLENGED 1

- Moorburg power station, River Elbe, Port of Hamburg
- CJEU Judgment, Case C – 142/16, April 2017
- **Project includes mitigation and monitoring**
- **Hamburg authorities concluded no significant effect because losses at power station water intake compensated by aid to migration of 2<sup>nd</sup> fish ladder**





## INADEQUATE MONITORING LEGALLY CHALLENGED 2

- **2<sup>nd</sup> fish ladder built 2010 and monitored to 2014 before power station commissioned in 2015**
- **Proved 2<sup>nd</sup> fish ladder used by salmon and lamprey over 4 years monitoring**
- **So that's all good then?**
  
- **EU challenged Germany on grounds of failure to comply with precautionary principle in Article 6(3)**
- **Should not have given consent**
- **Monitoring flawed, no basis for saying no significant effect.**
- **Why?**

## INADEQUATE MONITORING LEGALLY CHALLENGED 3

- **No monitoring of use of 1<sup>st</sup> fish ladder!**
- **No monitoring of fish populations or breeding success in SACs!**
- **No monitoring during the operation of the power station water intake (monitoring of 2<sup>nd</sup> fish ladder ended before power station was commissioned)!**
- **Merely confirming 2<sup>nd</sup> fish ladder used by fish is not sufficient for the precautionary principle**

**My view: it wasn't 'validation monitoring' or even 'compliance monitoring'. It was meaningless!**

