



**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**

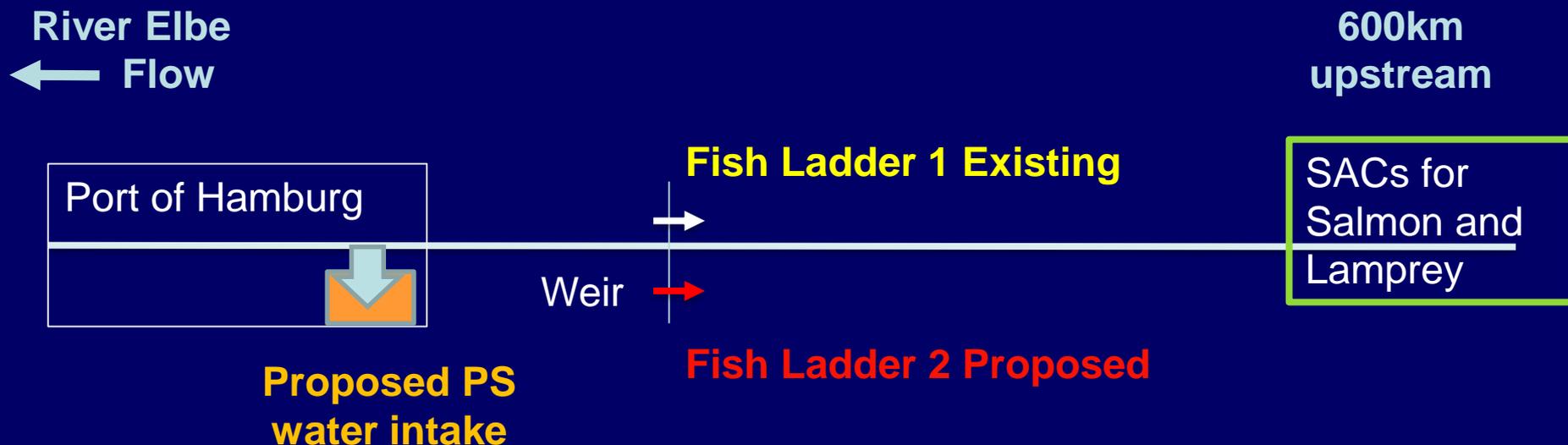
CURRENT LEGAL REQUIREMENTS FOR MONITORING:

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 2nd fish ladder**



INADEQUATE MONITORING LEGALLY CHALLENGED 2

- **2nd fish ladder built 2010 and monitored to 2014 before power station commissioned in 2015**
- **Proved 2nd 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 1st 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 2nd fish ladder ended before power station was commissioned)!**
- **Merely confirming 2nd 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!

