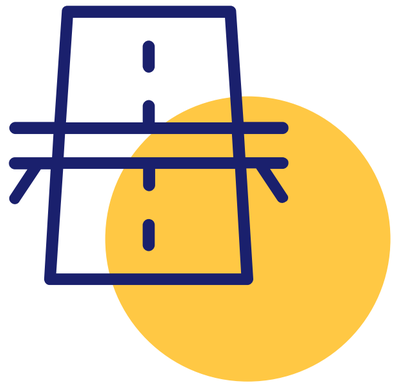
Transport Infrastructure Ireland

Presentation on TII's Biodiversity Standards



16th – 18th of June 2025 – Christian Nea/Eimear Fox/Colin Murphy

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII's Biodiversity Plan

Biodiversity Plan

- ***Vincent O'Malley*** (TII), ***Eimear Fox*** (TII),***Christian Nea*** (TII), ***Sarah-Jane Phelan*** (TII), ***Robbie Watt*** (seconded from WSP).
- ***Biodiversity Plan.***
- Informed by existing national, European and international policy and legislation.
- Setting of objectives, including short, medium and long-term goals/actions.

Biodiversity Plan

- Objectives include commitments to:
  - develop and utilise a biodiversity metric to demonstrate no net loss or net gain of biodiversity; and
  - publish biodiversity-related standard and technical documents.

Objectives and actions to achieve TII biodiversity plan were developed with cognisance of existing objectives and actions stipulated in national, sectoral and TII policy and action plan documents. Actions under each objective were assigned to short-, medium- or long-term timescales based on the anticipated programme of development and implementation.

Five overarching objectives and associated actions to deliver on TII biodiversity plan are detailed below.

Image: Grass verges mown for biodiversity, N81 Wicklow

Image: Wildflower meadow on a roundabout at junction 16 of the M7 in Portlaoise - Photo credit Brian Gaynor

OBJECTIVES

1. Increase biodiversity capacity, resources, collaboration and capability
2. Develop and update biodiversity standard and technical documents
3. Support research, monitoring and data sharing
4. Embrace biodiversity accounting methodologies and strive for net gain
5. Focus on the key biodiversity issues

Objective 2 – Develop and Update Biodiversity Standard and Technical Documents

Short Term

2.1 All new or updated Standard and Technical documents will be developed with consideration of potential implications for biodiversity, regardless of technical discipline

2.2 Develop a new Biodiversity Impact Assessment Standard Document

2.3 Develop a biodiversity checklist for all scales of project

2.4 Biodiversity to be a key consideration in the development of other environmental Standard and Technical documents particularly those pertaining to Population and Human Health, Water, Air, Landscape and Climate

2.5 Standards and Technical Documents will be developed based on existing national and international research and standards, supported by TII funded research where appropriate

Medium Term

2.6 Develop Biodiversity Standard Documents for the Construction and Commissioning e of projects, under the Environment stream

2.7 Development of topic specific Standard and Technical Documents to support the overarching Biodiversity Impact Assessment and Construction and Commissioning documents e.g., digital data management, surveying habitats using remote sensing methods, the role of the environmental/ ecological clerk of works on projects and monitoring of the effectiveness of mitigation measures

Long Term

2.8 Develop a Strategic Biodiversity Action Plan for the operation, asset management and maintenance for the entire TII network

Objective 2 – Develop and Update Biodiversity Standard and Technical Documents

Short Term

2.1 All new or updated Standard and Technical documents will be developed with consideration of potential implications for biodiversity, re

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2.3 Develop scales of proje

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Long Term

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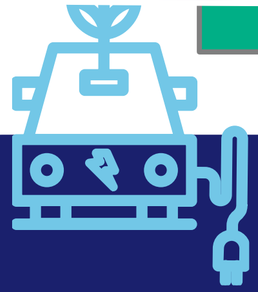

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Long Term

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Objective 4 – Embrace biodiversity accounting methodologies and strive for net gain

Short Term

4.1 Develop a biodiversity accounting metric to implement on all new projects and track progress on project specific biodiversity enhancements

Medium Term

4.2 Strive to achieve no net loss of biodiversity on all new projects by 2025

4.3 Investigate the synergistic benefits of achieving BNG on wider ecosystem services to highlight wider benefits and address the potential weaknesses in the adopted approach

4.4 Establish the biodiversity baseline of the entire TII network using the biodiversity accounting metric

Long Term

4.5 Strive to achieve a net gain for biodiversity on all new projects by 2030

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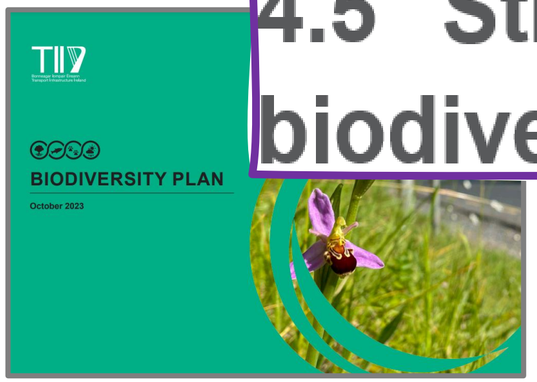
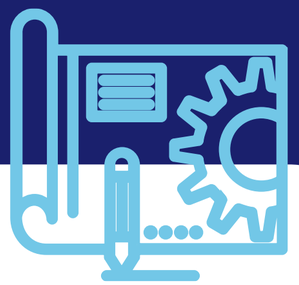


Objective 2.2

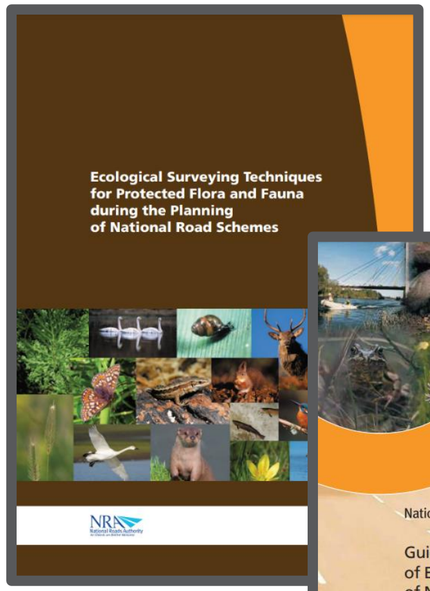


Objective 2 – Develop and Update Biodiversity Standard and Technical Documents

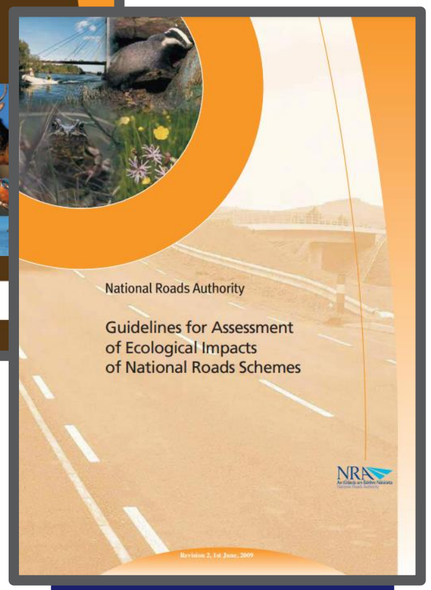
2.2 Develop a new Biodiversity Impact Assessment Standard Document

Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

- Project Manager: ***Christian Nea*** (TII), ***Biodiversity Impact Assessment.***
- Replacement of NRA ecological guidelines.
- Update to incorporate current best practice (e.g. *Guidelines for Ecological Impact Assessment in the UK and Ireland* (Rev. 1.3, CIEEM, 2024)).
- Contract signed in June 2024.
- Contract duration: 2 years.



Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes (NRA, 2008).



Guidelines for Assessment of Ecological Impacts of National Road Schemes (Rev. 2, NRA, 2009).

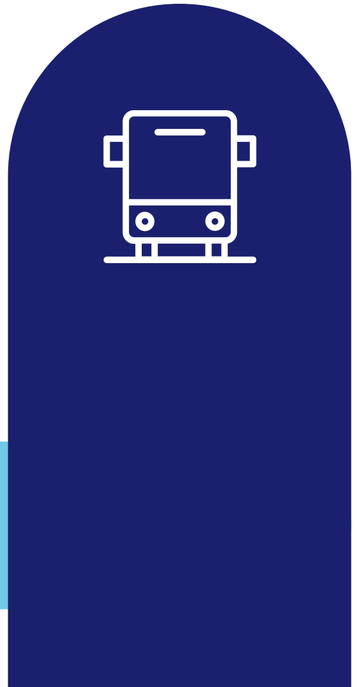
Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

Contract commencement → Submission of draft literature summary report and initial table of contents → First Technical Steering Committee meeting → Submission of final summary of the literature review and revised initial table of contents

Submission of draft standard document → Second Technical Steering Committee meeting → Submission of second draft standard document → Initiate industry and public consultation

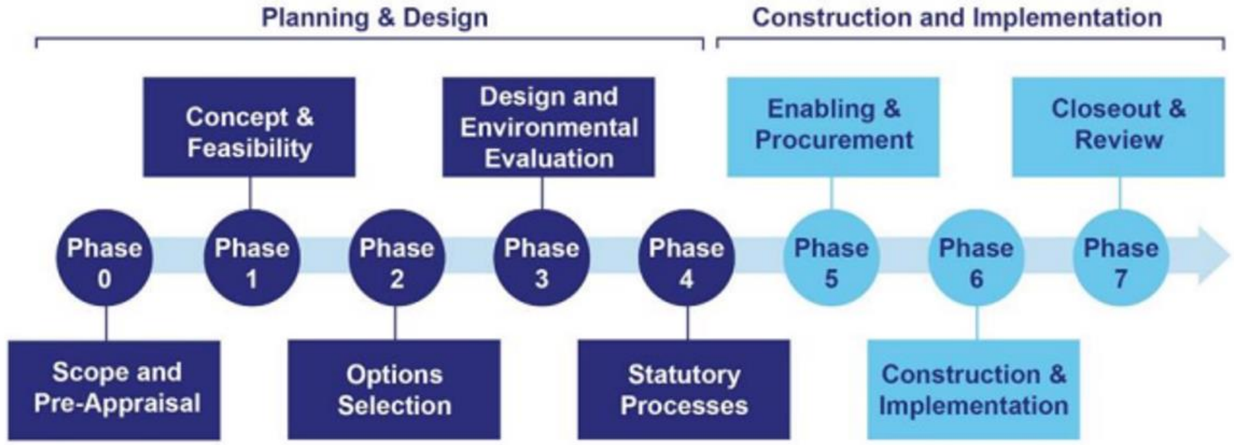
Carry out industry workshop → Complete industry and public consultation → Submission of third draft standard document → Third Technical Steering Committee meeting

Submission of fourth draft standard document → Fourth Technical Steering Committee meeting → Receipt of final standard document → Completion of dissemination



Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

- Literature review completed.
- Standard will provide requirements, guidance, etc., on how biodiversity is considered at each Project Phase.
- Integration with Project Appraisal Guidelines **(PAG),** Project Management Guidelines **(PMG)** and Project Mangers Manual **(PMM).**



Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

- Assessment of effects on biodiversity occurs throughout Phase 2 – Options Selection.
- At Phase 3 – Design and Environmental Evaluation, the effects on biodiversity inform the project design.
- The final design may be subject to a formal assessment as part of an EIA or standalone Biodiversity Impact Assessment (BIA).
- Encourages the application of the mitigation hierarchy (avoid – mitigate – compensate).

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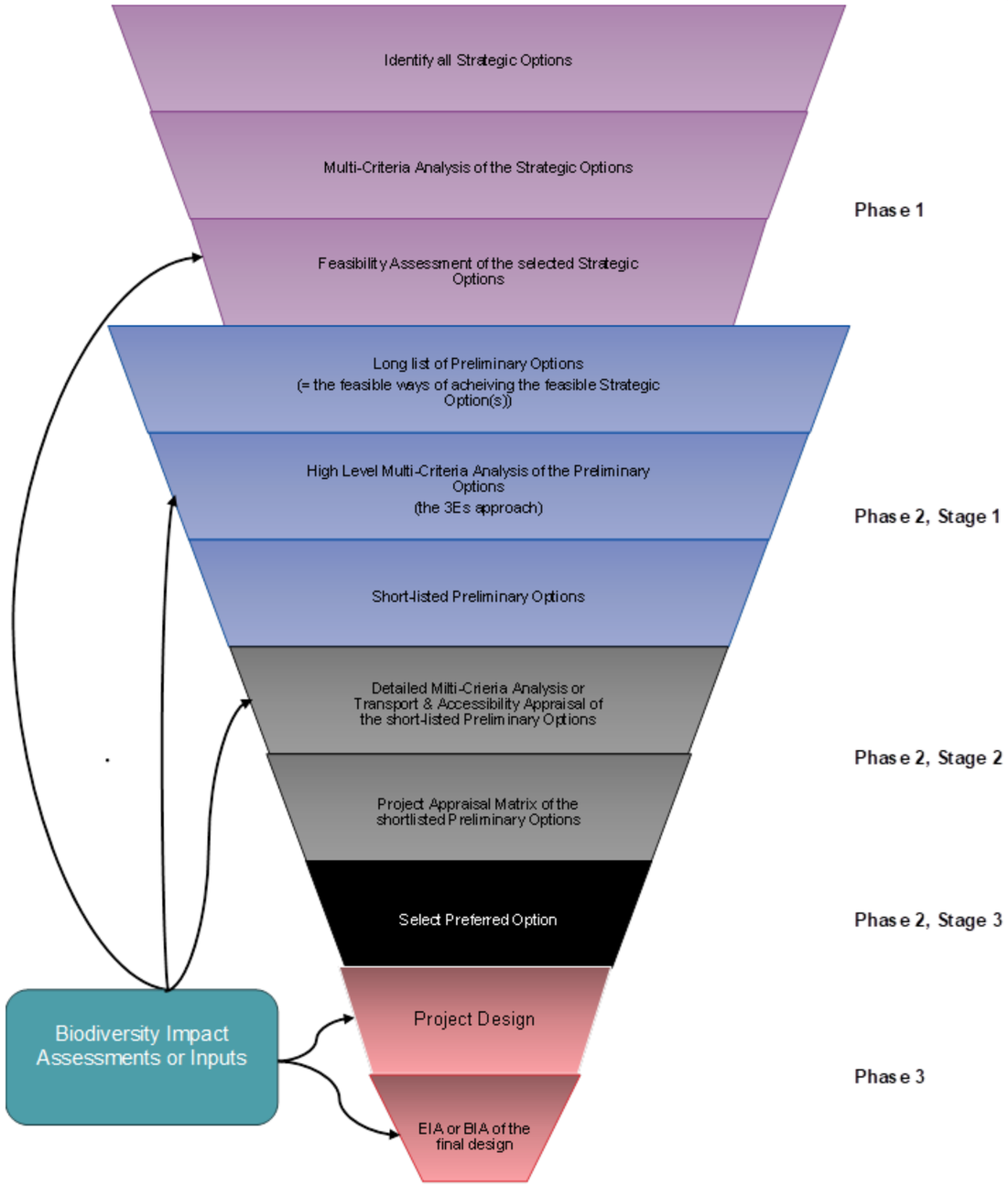
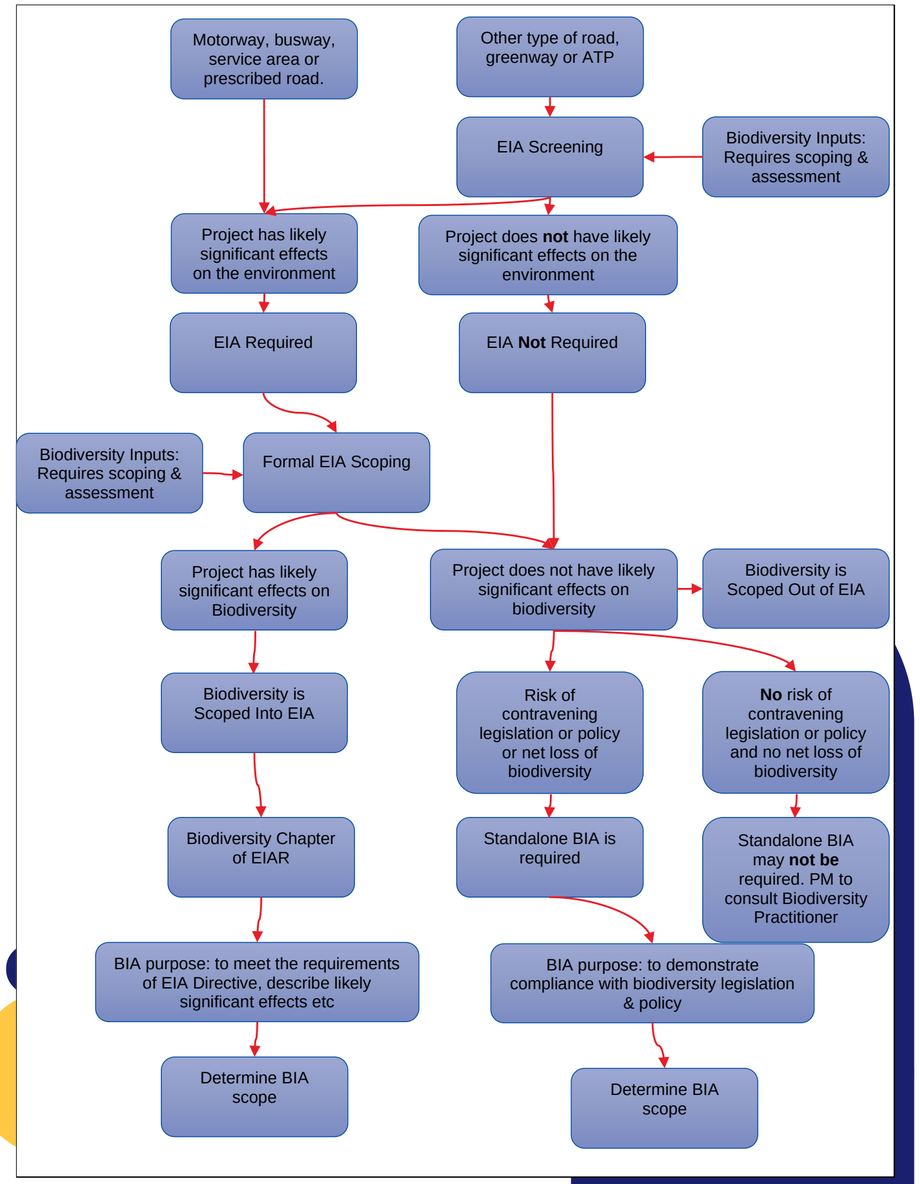
Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)



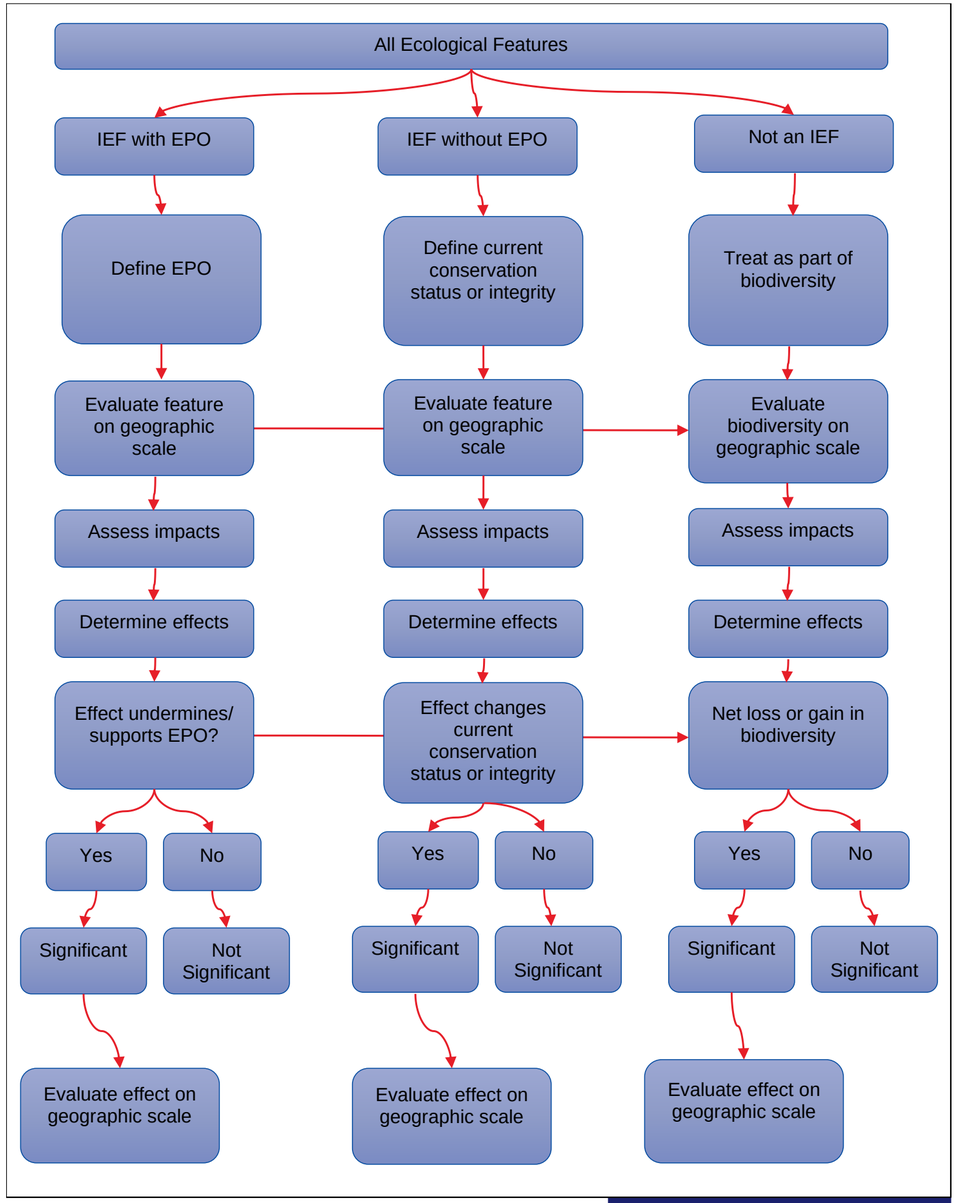
Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

- Will set out:
  - When a formal biodiversity impact assessment (BIA) is required.
  - The purpose of the assessment and therefore its method/scope.
  - How to determine the features to be included in the BIA.



Biodiversity
Standard
Planning and Evaluation (PE)
Environment (ENV)

- Amending EIA Directive 2014 requires assessment of effects on ‘biodiversity’.
- Biodiversity is not just protected sites, listed habitats and listed species, although these are most important aspects.
- New Standard will ensure biodiversity is considered.
- When available, the ‘significance test’ for important ecological features (IEFs) will be based on environmental protection objectives (EPOs).
- EPOs can be derived from a variety of sources (e.g. Habitats Directive).



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Objective 4

Objective 4 – Embrace biodiversity accounting methodologies and strive for net gain

4.1 Develop a biodiversity accounting metric to implement on all new projects and track progress on project specific biodiversity enhancements

4.2 Strive to achieve no net loss of biodiversity on all new projects by 2025

4.5 Strive to achieve a net gain for biodiversity on all new projects by 2030

Biodiversity Accounting Metric

Planning and Evaluation (PE)/Research (RE)

Environment (ENV)

- ***Sarah-Jane Phelan*** (TII)
- ***Developing a Biodiversity Accounting Methodology for Use on Linear Infrastructure Projects In Ireland***
- Carry out research and trials leading to the development of a Biodiversity Accounting Metric (BAM) applicable to Irish biodiversity and to TII's projects.
- Project initiated in Q4 2023.
- **Deliverables:**
  - **Option Selection BAM Toolkit**
  - **Full Project BAM Toolkit**
  - **User Guide**
- Requirements re: usage, etc., will be contained in the Biodiversity Impact Assessment Standard Document.

Biodiversity Accounting Metric

Planning and Evaluation (PE)/Research (RE)

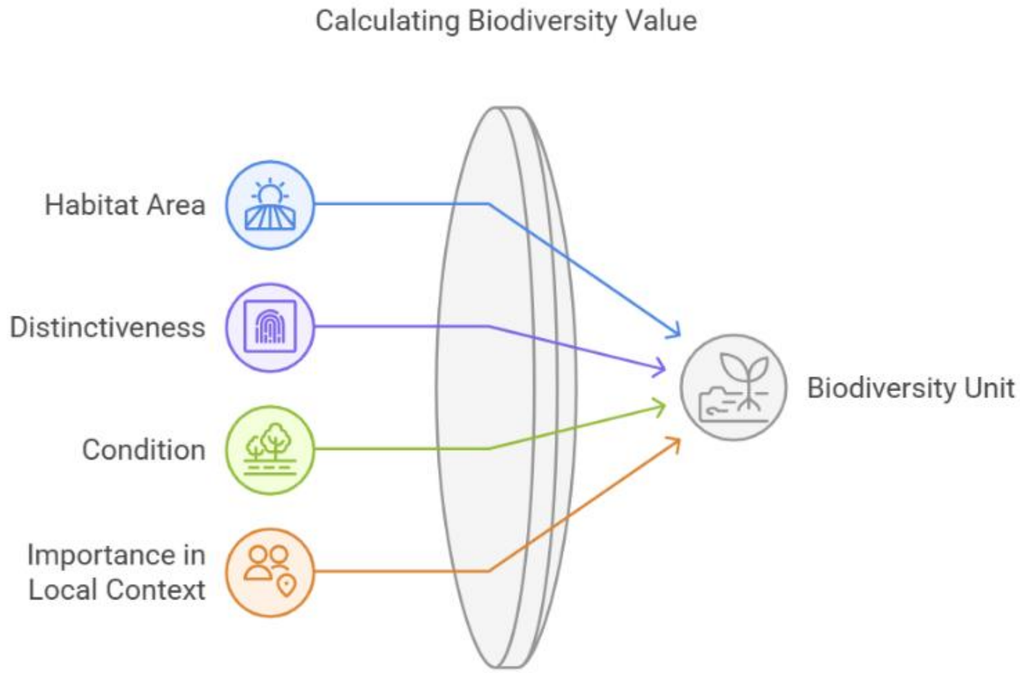
Environment (ENV)

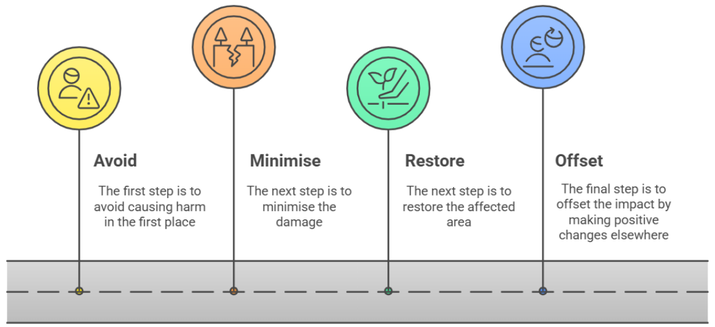
- Quantitative approach to measuring biodiversity for linear infrastructure projects – ***Biodiversity Units.***
- Approach aligns with *CIEEM Biodiversity Net Gain - Good Practice Principles for Development.*
- The Mitigation Hierarchy underpins the application of the BAM toolkit.
- Separate process to biodiversity impact assessment.

Biodiversity Accounting Metric

Planning and Evaluation (PE)/Research (RE)

Environment (ENV)





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Objective 2.7

Objective 2 – Develop and Update Biodiversity Standard and Technical Documents

2.7 Development of topic specific Standard and Technical Documents to support the overarching Biodiversity Impact Assessment and Construction and Commissioning documents

Bats
Standard
Planning and Evaluation (PE)
Environment (ENV)

- ***Colin Murphy*** (TII), ***Christian Nea*** (TII).
- Update NRA document entitled '*Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes.*
- Align with industry best practice, e.g., Collins (2023), Matthews, J. (2024).
- Action 4.3g of the Lesser Horseshoe Bat Species Action Plan 2022-2026:

  "Ensure that guidance and advice to road planners and developers is up to date and based on the results from monitoring studies of previous mitigation measures."
- Task Agreement under development.

Biodiversity (Deer)
Standard
Planning and Evaluation (PE), Design (DN) and Construction & Commissioning (CC)
Environment (ENV) and Safety (STY)

- TII Team Leader: ***Christian Nea*** (TII).
- Large cross-disciplinary team involved.
- Work Package 3.3o.
- ***N77 Pilot Deer Management Study.***
- Commenced July, 2021.
- Literature review and ecological studies of 900 Ha study area.
- Mitigation, including advanced signage and vegetation clearance.
- Liaison with landowners *vis-à-vis* deer management.
- Monitoring.

Biodiversity (Deer)
Standard
Planning and Evaluation (PE), Design (DN) and Construction & Commissioning (CC)
Environment (ENV) and Safety (STY)

- TII Team Leader: ***Alastair de Beer*** (TII), ***Christian Nea*** (TII).
- ***Deer Standards.***
- Carry out ~ 5 case studies and develop proposed mitigation to a tender-ready state.
- Develop a suite of standard documents: General [GE], Planning and Evaluation [PE], Design [DN], Construction and Commissioning [CC] and Asset Management and Maintenance [AM] in relation to deer assessment and management on the national road network.

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