Fundamental Consideration and Applications

ACBA 7004

Alissa Flatley

a.flatley@uwtsd.ac.uk



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Outline

- **PESTEL Analysis**
- Technical Advice Notes (TAN)
  - Nature Conservation and Planning
- FCERM
- Habitat Corridors (reading)
- Leasing and Energy Futures (UK)



UNECE Multilateral Environmental Agreements MEA

- UNECE has negotiated five environmental conventions, also known as multilateral environmental agreements or MEAs, all of which are now in force.
- Convention on Long-range Transboundary Air Pollution
- Convention on Environmental Impact Assessment in a Transboundary Context
- Convention on the Protection and Use of Transboundary Watercourses and International Lakes
- Convention on the Transboundary Effects of Industrial Accidents
- Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

Five conventions

- The governing bodies of the UNECE MEAs are serviced by the UNECE secretariat, which also helps them to monitor the implementation of the treaties. While many of the UNECE environmental conventions started as regional instruments, a number of them have become or are in the process of going global, and the work under these MEAs has for a long time included States outside the UNECE region in their activities. This trend underscores the impact of the UNECE MEAs, which have transformed the legal and natural landscape in our region and beyond.
- The five conventions have been supplemented by a number of protocols, including:
- Protocol on Water and Health
- Protocol on Strategic Environmental Assessment
- Protocol on Pollutant Release and Transfer Registers
- Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters (not in force)

ACBA7004

Last Week



COP28 Activity

- We are currently in the middle of COP28. Referring to news and articles from COP28, complete a PESTEL analysis for a MEA or a convention from the list provided.
- You can work in pairs and will need to provide adequate evidence of research (e.g. citations and key data). You will be sharing your PESTEL analysis next week.

PESTEL Analysis

P	E	S	T	E	L
Political	**Economical**	**Social**	**Technological**	**Environmental**	**Legal**
Explore: • Government stability • Health service readiness • Current taxation policy • Future taxation policy • The current and future political support • Grants, funding and initiatives • Trade bodies • Effect of wars or worsening relations with particular countries • Election campaigns	**Explore:** • National debt levels • Strength of consumer spending • Current and future levels of government spending • Ease of access to loans • Current and future level of interest rates, inflation and unemployment • Specific taxation policies and trends • Exchange rates • Overall economic situation	**Explore:** • Lifestyle trends • demographics • consumer attitudes and opinions • media views • law changes affecting social factors • brand, company, technology image • consumer buying patterns • fashion and role models • major events and influence • Inner city pandemic trends	**Explore:** • Relationship to flexible working • Relationship to remote working • Sector technology demand • Relevant current and future technology innovations • The level of research funding • The ways in which consumers make purchases • Intellectual property rights	**Explore:** • Relationship with global warming • Relationship with recycling and global fight against waste • Relationship with global fight against plastic usage • The level of pollution created by the product or service • Attitudes to the environment from the government, media and	**Explore:** • Legislation in areas such as employment, competition and health & safety • Environmental legislation • Future legislation changes • Changes in European law • Trading policies • Regulatory bodies • Working environment • Future Pandemic legal sensitivities



Activity

Present the main findings from last week's PESTEL analysis?

What MEA did you select?

What big updates have we had from COP28? Have they impacted or are likely to impact your MEA?

Week	Date	Topic	Lecturer	Pre-Lecture preparation
1	03/10/23	Principles of Environmental Policy	AF	
2	10/10/23	Reviewing environmental assessment articles	AF	Selecting EIA article before Week 2 lecture
3	17/10/23	Fundamentals of EIA	AF	
4	24/10/23	Fieldwork Week (EIA review and SLS preparation)	SL	
5	31/10/23	Introduction to planning	AF	
6	07/11/23	Examples of practice	AF/IB	
7	14/11/23	EIA and SEA work in practice	AF	
8	21/11/23	Examples in the marine environment	AF	
9	28/11/23	Future planning strategies	AF	
10	05/12/23	Coordination of environmental planning and policy	AF	
11	12/12/23	Fundamental considerations and applications	AF	
	19/12/22	CHRISTMAS BREAK		
	26/12/22			
	02/01/24			
12	09/01/24	Assignment clinic and policy communication	AF	
	09/01/24	**Report due: Environmental Impact Assessment Review (Journal) (70%)**		
13	16/01/24	Sustainable urban planning	AF	
14	23/01/24	Conference Presentation	AF	
	23/01/2024	**Deadline: Conference Journal (10%), Deadline Conference Presentation (20%)**		
15	30/01/24		AF	
16	06/02/24		AF	

Fundamental Considerations

- EIA
- Planning
- EIA
- SEA
- Marine Environment
- Future Planning Strategies

Where are we with environmental planning and policy?

- Environmental Policy - an overview | ScienceDirect Topics





Fundamental Considerations at what scale?

Dolzer (2001)

- Environmental policy has gradually evolved since the late 1960s. Whereas **the earlier efforts addressed distinct issues** such as pollution of air and water in the national contest and among international neighbors, more recent concerns such as the greenhouse effect, the destruction of the ozone layer, and the loss of biodiversity transcend national boundaries and require a **broad international response.**
- New principles and methods of environmental protection here slowly emerged, emphasizing, *inter alia*, the need for prevention of damage and the cost-effectiveness of environmental programs. On the international level, the key challenge today lies in the ongoing search for **a workable and effective consensus on a meaning of sustainable development** which reflects the realities both in the industrialized and in developing states.

Environmental Policy - an overview | ScienceDirect Topics

Cocklin (2009)

- Environmental policy, conservation, and the management of natural resources were once the function of appointed officials in the public sector. More recently, environmental policy and management has been constructed as a broader project, requiring the direct involvement of communities, individuals, nongovernment organizations, and the corporate sector. Thus, a tendency has emerged for responsibility for environmental protection and management in support of the public interest to be assigned more broadly.
- Changes in the role of government as regards environmental policy have occurred in response to social, economic, and technological changes that societies have undergone in the past several decades. This includes a shift from ‘government’ defined strictly by the nation-state to a more inclusive concept of ‘governance’ which recognizes **the contributions of various levels of government (global and transnational/regional/local) as well as the roles of the private sector, nongovernmental actors, and civil society**.

Environmental Policy - an overview | ScienceDirect Topics

Cocklin (2009)

- The concept of sustainability has raised many questions about the traditional development model and the **relationship between society, economy, and the environment.** It has also raised questions about the suitability of the traditional government model to meet the demands of managing the environment and economy sustainably. Thus, **responsibility for environmental management has been shifted upward to international bodies and to transnational companies, and downward to local governments, businesses, and resource users**. In addition, individuals play a greater role in the environment as consumers, private owners of land, and participants in the policy discourse, as does civil society.

Environmental Policy - an overview | ScienceDirect Topics

Cocklin (2009)

- The more prominent role that businesses and civil society groups have played in governance has not been without controversy**. Some believe that only the state can act in the public interest, while industry and citizens are motivated by self-interest**. Others see all actors as motivated by self-interest and, in this context, believe that competition and the market ensure the best outcomes – public and private. According to this view, civil society, consumers, and industry bear greater responsibility and share the risks, while the state maintains a role in setting standards and auditing performance.

Environmental Policy - an overview | ScienceDirect Topics

Cocklin (2009)

- While the roles, responsibilities, and powers assigned to the respective actors remain a contested subject, it is widely acknowledged that the **responsibility for the environment and sustainability has become a much broader project, no longer primarily the preserve of governments**, but one involving civil society, the private sector, and the state. Thus, success in achieving environmental policy objectives and sustainable development depends on the institutional capability of people in all arenas – the state, the market, and the community.

Environmental Policy - an overview | ScienceDirect Topics

Benson (2015)

- Environmental policy is primarily concerned with how to govern the relationship between humans and the natural environment in a mutually beneficial manner. Traditionally, it has been defined in terms of the problems it addressed, such as controlling pollution and waste flows and limiting habitat loss. However, policy makers have begun to appreciate that environmental policy will only be genuinely successful when it is sensitively integrated with other sectors and policy areas. Politically speaking, '**environmental policy integration**' represents a new but potentially difficult stage in the continuing metamorphosis of environmental policy into a much wider policy supporting sustainable human development

Environmental Policy - an overview | ScienceDirect Topics

Sustainability, Planning and Policy

- Room for all?



Sustainability, Planning and Policy

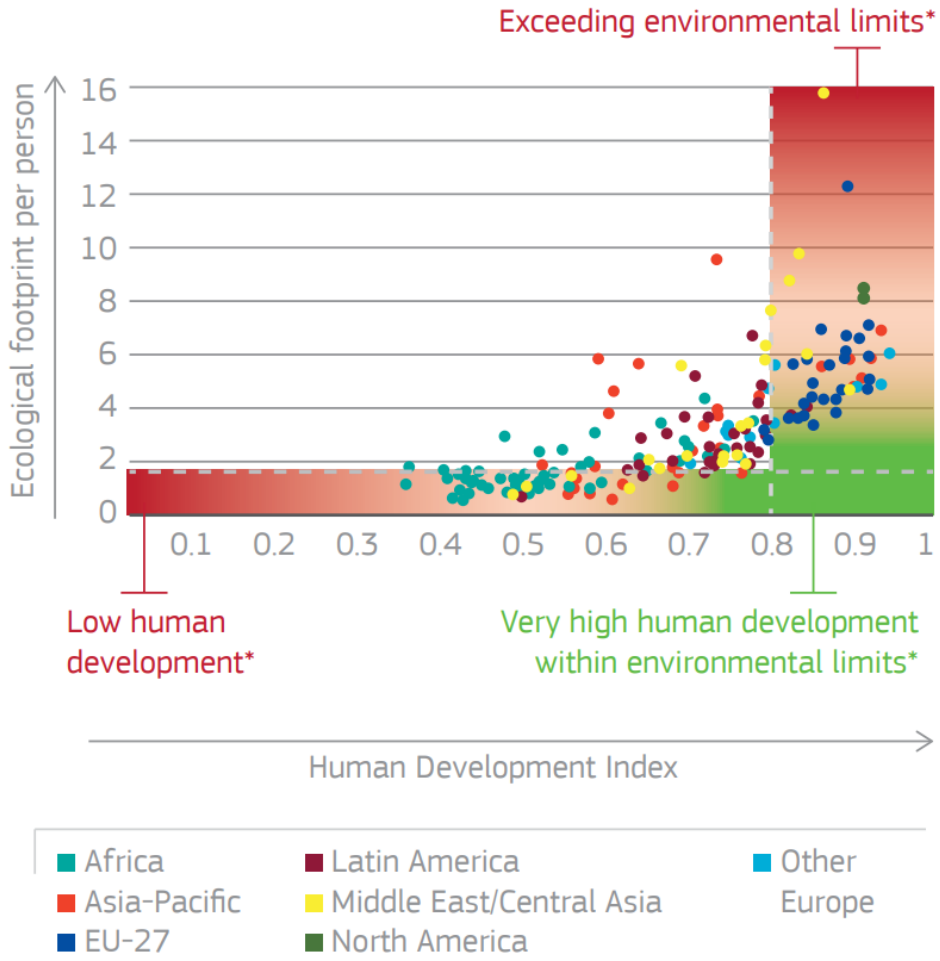
- Room for all?



Sustainability, Planning and Policy

- Room for all?

Not a single country has achieved a high human development within planetary boundaries



Note: Data for human development index and environmental limits from 2014.

Source: Global Footprint Network, UNDP.

Sustainability, Planning and Policy

- Room for all?

Contents

1. Sustainable development to better people's livelihood: Europe's competitive advantages 6

2. EU and global challenges to tackle 10

3. Moving towards a sustainable Europe by 2030 14

3.1 Policy foundations for a sustainable future 15

3.1.1 From linear to circular economy 15

3.1.2 Sustainability from farm to fork 17

3.1.3 Future-proof energy, buildings and mobility 18

3.1.4 Ensuring a socially fair transition 20

3.2 Horizontal enablers for the sustainability transition 22

3.2.1 Education, science, technology, research, innovation and digitisation 22

3.2.2 Finance, pricing, taxation and competition 24

3.2.3 Responsible business conduct, corporate social responsibility and new business models 26

3.2.4 Open and rules-based trade 27

3.2.5 Governance and ensuring policy coherence at all levels 29

4. The EU as a global trail blazer in sustainable development 31

5. Scenarios for the future 33

Annexes 45

Annex I: The Juncker Commission's contribution to the Sustainable Development Goals 45

Annex II: The EU's performance on the Sustainable Development Goals 65

Annex III: Summary of the contribution of the SDG Multi-Stakeholder Platform to the Reflection Paper "Towards a sustainable Europe by 2030" 121

Local Fundamental Considerations



What do we mean by fundamental considerations?

- Overlooking/loss of privacy
- Loss of daylight/sunlight or overshadowing
- Loss of outlook
- Parking
- Highway safety and traffic
- Noise
- Character or appearance

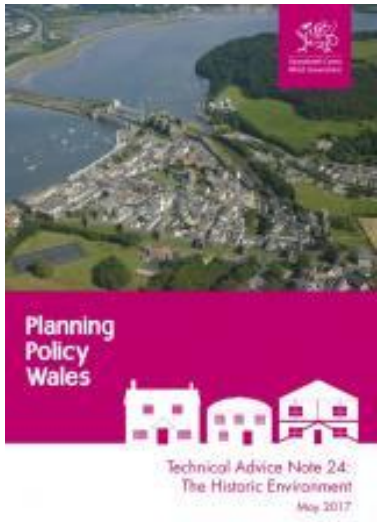
- Design and materials
- Government policy
- Proposals in the development plan
- Disabled persons' access
- Previous planning decisions (including appeal decisions)
- Nature conservation
- Flood risk

Mastering Planning Considerations: The Secret to Planning Success - Urbanist Architecture - Small Architecture Company London

Fundamental Considerations (and help!)

- **Technical Advice Notes (TAN)**
- Technical advice notes (TANs) provide detailed planning advice. Local planning authorities take them into account when they are preparing development plans.

- Technical advice notes | GOV.WALES



Technical Advice Notes

- Technical advice note TAN) 2: planning and affordable housing
- Technical advice note (TAN) 3: simplified planning zones
- Technical advice note (TAN) 4: retail and commercial development
- Technical advice note (TAN) 5: nature conservation and planning
- Technical advice note (TAN) 6: planning for sustainable rural communities
- Technical advice note (TAN) 7: outdoor advertisement control
- Technical advice note (TAN) 10: tree preservation orders
- Technical advice note (TAN) 11: noise
- Technical advice note (TAN) 12: design

- Technical advice note (TAN) 13: tourism
- Technical advice note (TAN) 14: coastal planning
- Technical advice note (TAN) 15: development and flood risk (2004)
- Technical advice note (TAN) 16: sport, recreation and open space
- Technical advice note (TAN) 18: transport
- Technical advice note (TAN) 19: telecommunications
- Technical advice note (TAN) 20: planning and the Welsh language
- Technical advice note (TAN) 21: waste
- Technical advice note (TAN) 23: economic development
- Technical advice note (TAN) 24: the historic environment

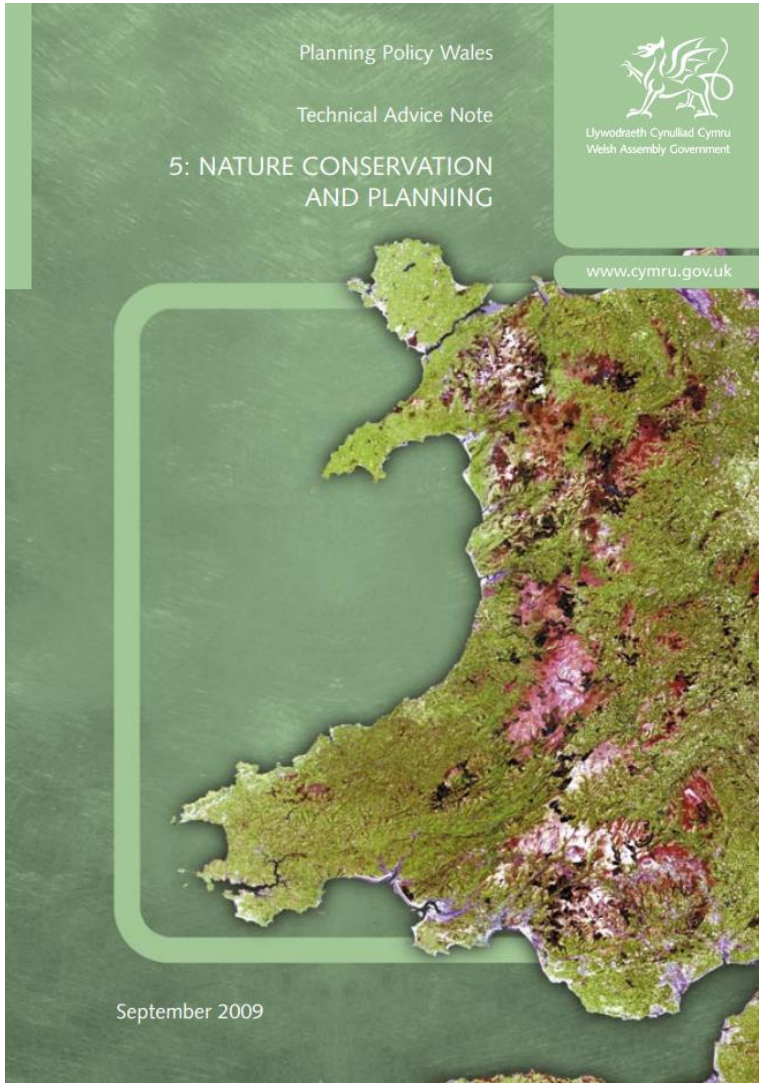
Technical Advice Notes

- Technical advice note TAN) 2: planning and affordable housing
- Technical advice note (TAN) 3: simplified planning zones
- Technical advice note (TAN) 4: retail and commercial development
- Technical advice note (TAN) 5: nature conservation and planning
- Technical advice note (TAN) 6: planning for sustainable rural communities
- Technical advice note (TAN) 7: outdoor advertisement control
- Technical advice note (TAN) 10: tree preservation orders
- Technical advice note (TAN) 11: noise
- Technical advice note (TAN) 12: design

- Technical advice note (TAN) 13: tourism
- Technical advice note (TAN) 14: coastal planning
- Technical advice note (TAN) 15: development and flood risk (2004)
- Technical advice note (TAN) 16: sport, recreation and open space
- Technical advice note (TAN) 18: transport
- Technical advice note (TAN) 19: telecommunications
- Technical advice note (TAN) 20: planning and the Welsh language
- Technical advice note (TAN) 21: waste
- Technical advice note (TAN) 23: economic development
- Technical advice note (TAN) 24: the historic environment

Technical Advice Note

- This TAN demonstrates how local planning authorities, developers and key stakeholders in conservation can work together to deliver more sustainable development that does not result in losses from the natural heritage but instead takes every opportunity to enhance it.



[Technical Advice Note_Nature and Conservation.pdf (uwtsd.ac.uk)]



Activity

Choose a TAN

Explore what it contains and share this with the group

FCERM

National Strategy for **Flood and Coastal Erosion Risk Management**

- 40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)



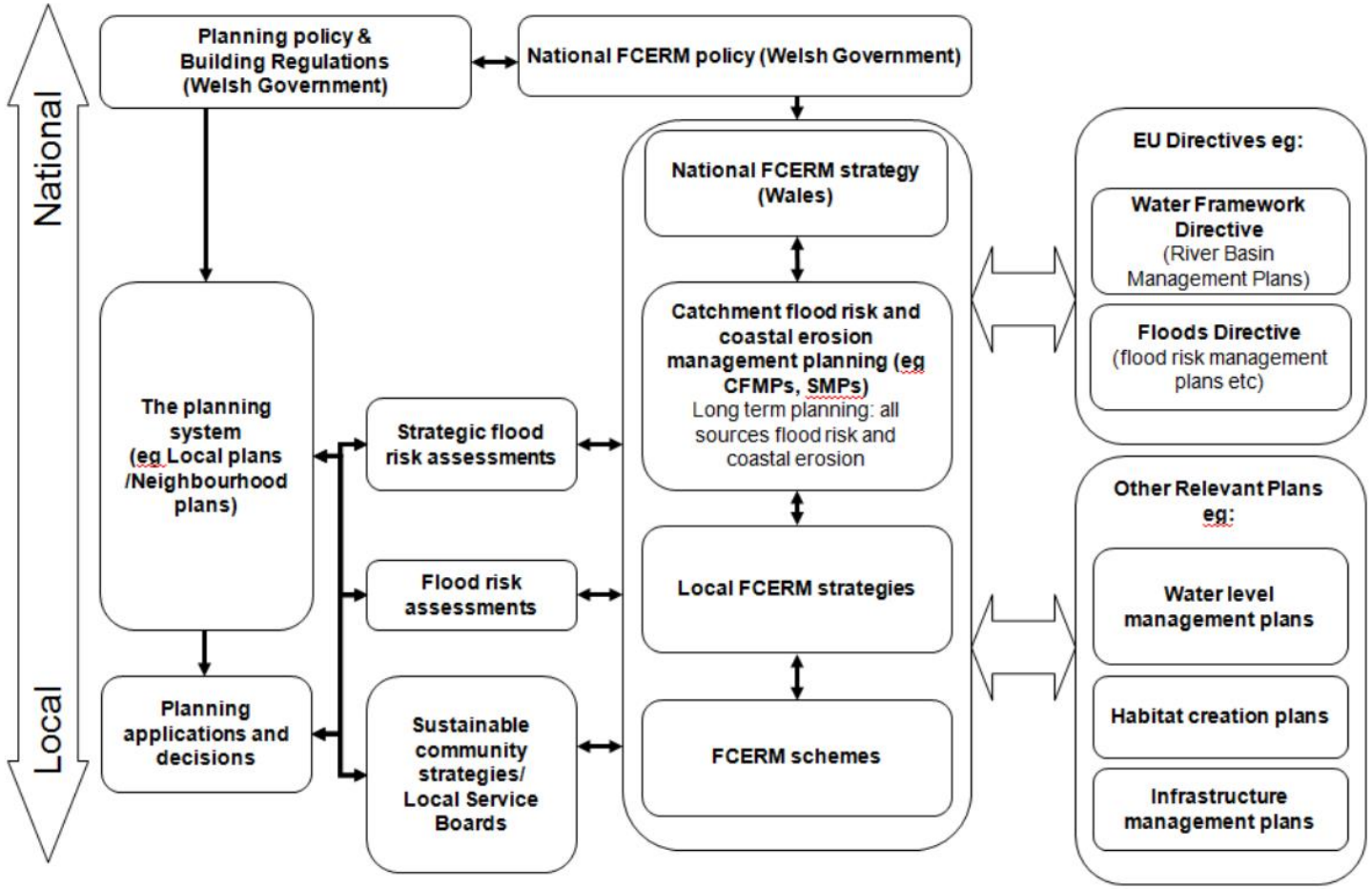
FCERM

- This Strategy sets out how we intend to manage the risks from flooding and coastal erosion across Wales. It sets objectives and measures for all partners to work towards over the life of this document, which will be 10 years unless significant policy updates are required prior to that time.



FCERM

- This is the second National Strategy on Flood and Coastal Erosion Risk Management (FCERM) for Wales, replacing the 2011 Strategy. It is prepared under the terms of the Flood and Water Management Act 2010.



[Flood risk management in Wales: are changes needed? (senedd.wales)]

[Flood mitigation; 2023/24 – The National Infrastructure Commission for Wales]

FCERM

- 40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)
- Whilst measures are designed to be clear and deliverable over the next decade, the Strategy has been drafted with a longer-term, strategic view, recognising the nature of flood and coastal erosion risk with respect to the challenges of climate change. In this way, it will work alongside other strategic plans for shoreline management, infrastructure and planning to set out the direction we want to take.

Strategic and Legislative Context

- [40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)]



Strategic and Legislative Context

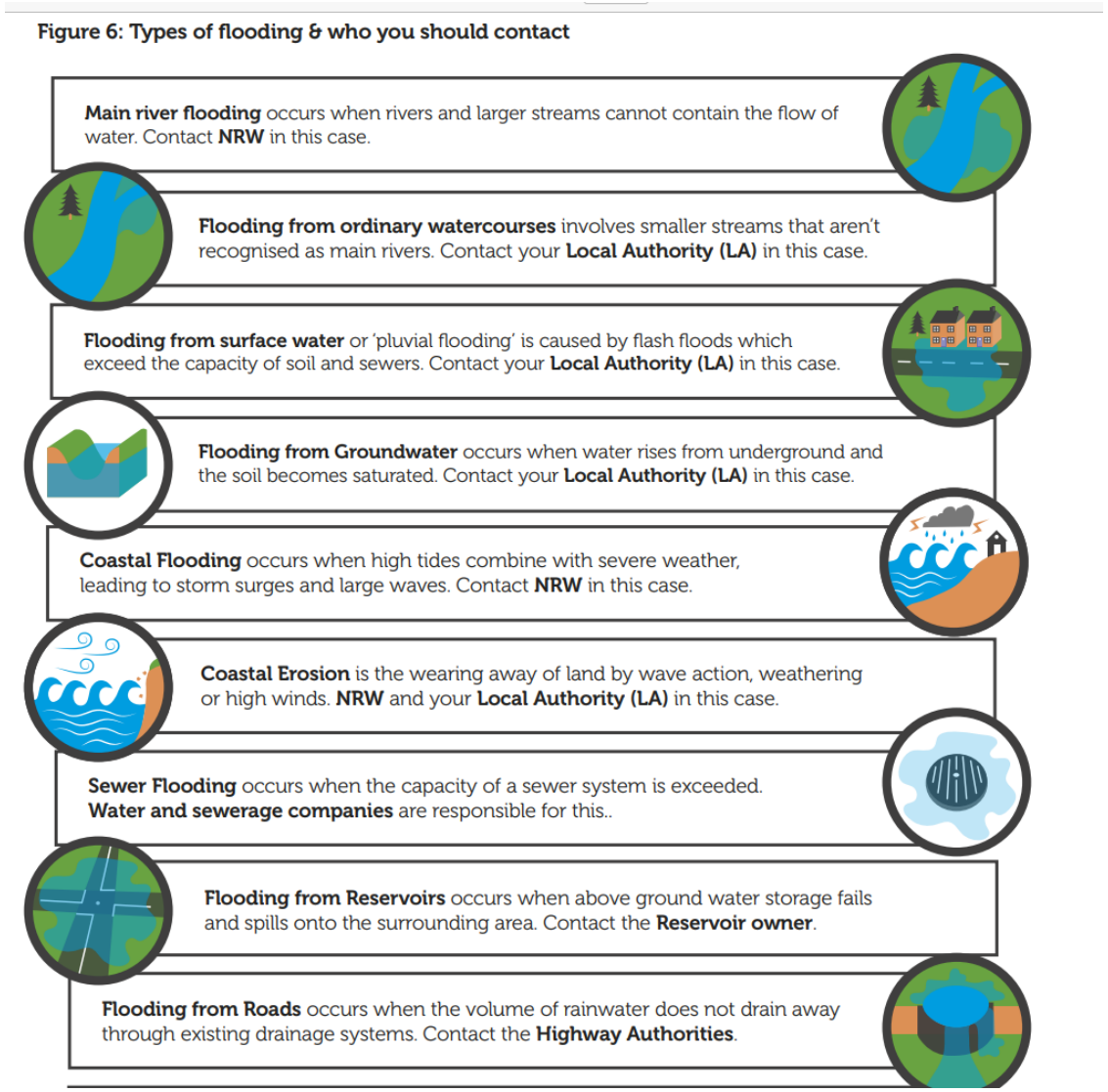
- 40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)

Figure 5: Overview of Roles and Responsibilities



Strategic and Legislative Context

- [40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)]

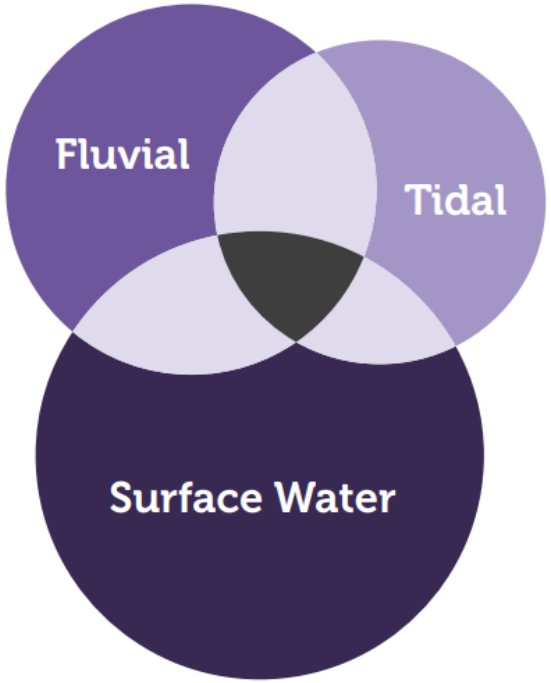


ACBA7004

Risk & Source of Flooding

- 40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)

Figure 10: Venn diagram showing properties at risk, by three sources of flooding.

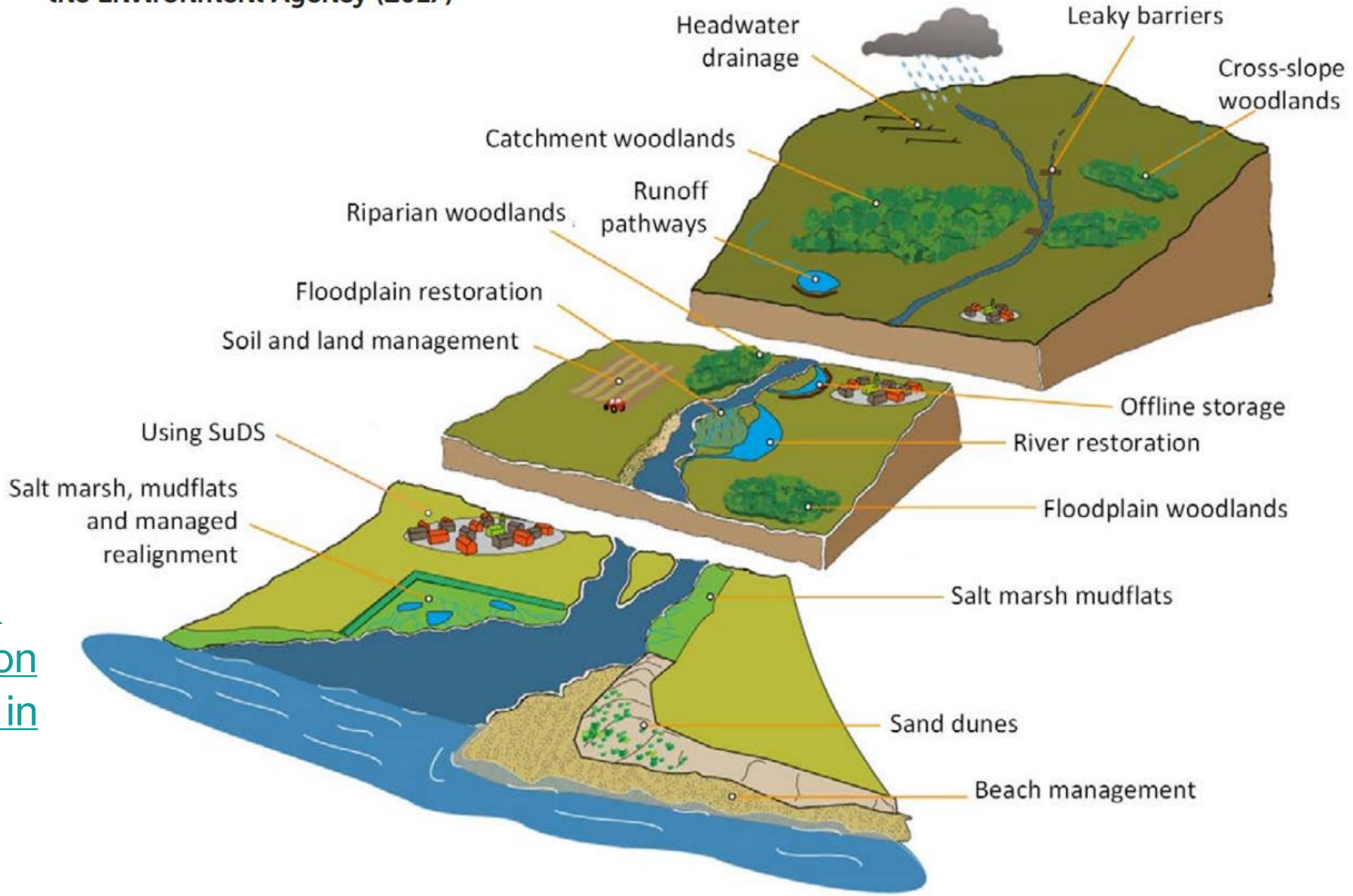


1 source	Fluvial only	43,643
1 source	Tidal only	33,129
1 source	Surface Water only	101,565
2 sources	Fluvial and Tidal	29,977
2 sources	Tidal and Surface Water	11,825
2 sources	Surface Water and Fluvial	20,358
3 sources	Fluvial, Tidal and Surface Water	4,621
	Total	**245,118**

Strategic and Legislative Context

- [40996 National Strategy for Flood and Coastal Erosion Risk Management in Wales (English) (gov.wales)]

Figure 14 – Catchment Diagram, Working with Natural Processes, Adapted from the Environment Agency (2017)





Reading for 2024

Moodle!

Week	Date	Topic	Lecturer	Pre-Lecture preparation
1	03/10/23	Principles of Environmental Policy	AF	
2	10/10/23	Reviewing environmental assessment articles	AF	Selecting EIA article before Week 2 lecture
3	17/10/23	Fundamentals of EIA	AF	
4	24/10/23	Fieldwork Week (EIA review and SLS preparation)	SL	
5	31/10/23	Introduction to planning	AF	
6	07/11/23	Examples of practice	AF/IB	
7	14/11/23	EIA and SEA work in practice	AF	
8	21/11/23	Examples in the marine environment	AF	
9	28/11/23	Future planning strategies	AF	
10	05/12/23	Coordination of environmental planning and policy	AF	
11	12/12/23	Fundamental considerations and applications	AF	
	19/12/22	CHRISTMAS BREAK		
	26/12/22			
	02/01/24			
12	09/01/24	Assignment clinic and policy communication	AF	
	09/01/24	**Report due: Environmental Impact Assessment Review (Journal) (70%)**		
13	16/01/24	Sustainable urban planning	AF	
14	23/01/24	Conference Presentation	AF	
	23/01/2024	**Deadline: Conference Journal (10%), Deadline Conference Presentation (20%)**		
15	30/01/24		AF	
16	06/02/24		AF	

- Policy Communication
- Sustainable Urban Planning
- Environmental Stewardship & Leasing

Offshore Wind Power



Offshore Leasing



[Environmental licensing for offshore wind farms: Guidelines and policy implications for new markets (uwtsd.ac.uk)]

Offshore Leasing



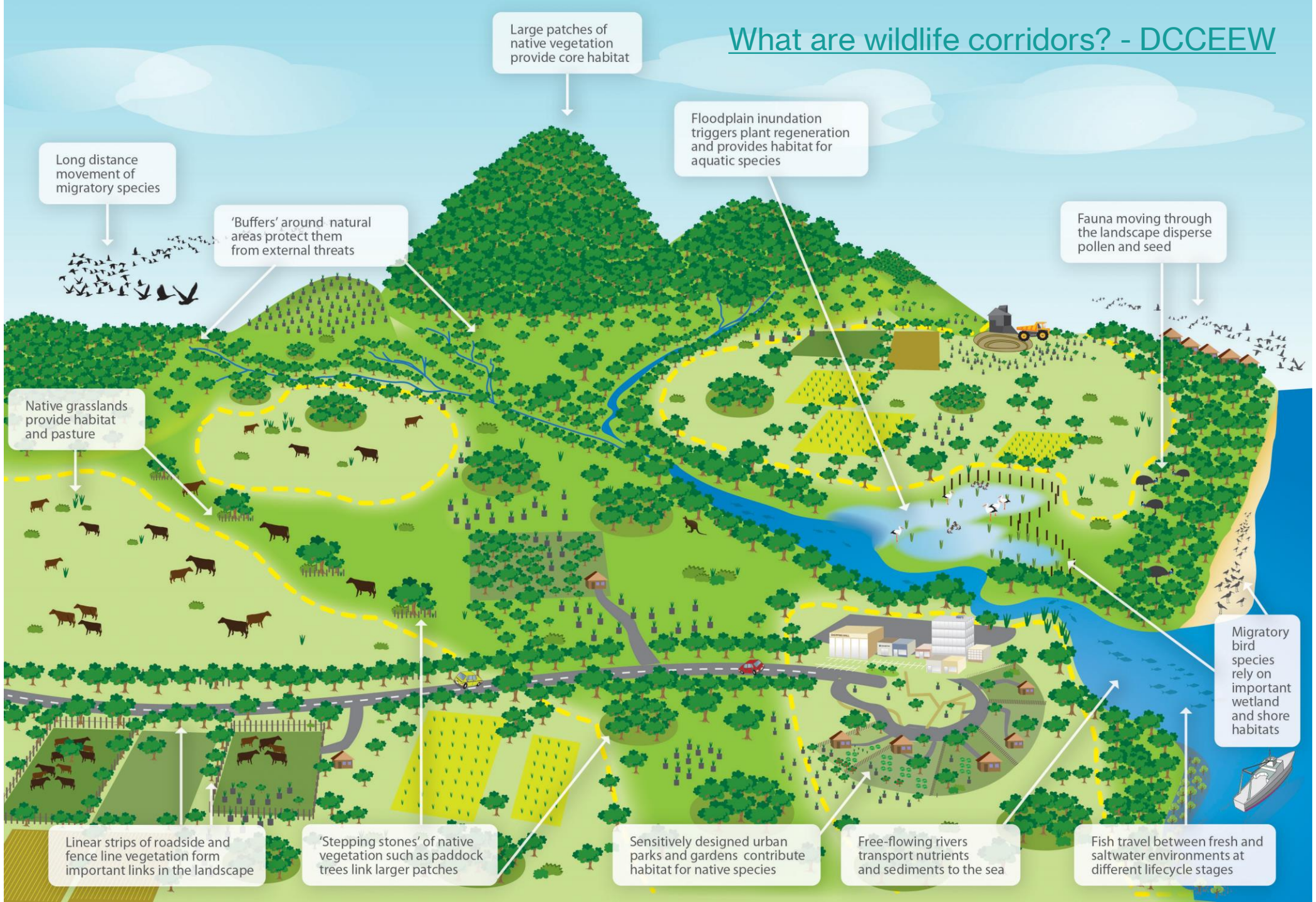
Fig. 9. Guidelines in environmental licensing for OWP in new and emerging markets.

Environmental licensing for offshore wind farms: Guidelines and policy implications for new markets (uwtsd.ac.uk)



Habitat Corridors

What are wildlife corridors? - DCCEEW



Habitatand Wildlife Corridors

- The UK government commissioned report and subsequent policy document highlighted ‘bigger, better and joined up’ sites for more resilient and effective ecological networks.
- Meanwhile, the latest National Planning Policy Framework (NPPF) refers to safeguarding ‘wildlife corridors and stepping stones’ and promoting ‘the conservation, restoration and enhancement of . . . ecological networks’
- Despite this, consistent quantitative implementation has proven challenging.



Wildlife Corridors

- **Landscape elements that contribute to wildlife corridors include:**
- Native grasslands provide habitat and pasture
- Linear strips of roadside and fence line vegetation form important links in the landscape
- 'Stepping stones' of native vegetation such as paddock trees link larger patches
- Sensitively designed urban parks and gardens contribute habitat for native species
- Free-flowing rivers transport nutrients and sediment to the sea
- Fish travel between fresh and saltwater environments at different lifecycle stages
- Migratory bird species rely on important wetland and shore habitats
- Fauna moving through the landscape disperse pollen and seed
- Floodplain inundation triggers plant regeneration and provides habitat for aquatic species
- Large patches of native vegetation provide core habitat
- 'Buffers' around natural areas protect them from external threats
- Long distance movement of migratory species

What are wildlife corridors? - DCCEEW

Landscape Scale Effects of Roads

- There is increasing concern about insufficient consideration of potential ecological effects of roads in project-specific environmental impact assessment (EIA) and other, more advanced types of EIA that exist in various countries. Local impacts are often treated superficially, and landscape-scale effects are usually neglected (Jaeger et al., 2015).

[Improving Environmental Impact Assessment and Road Planning at the Landscape Scale - Handbook of Road Ecology - Wiley Online Library]

Landscape Scale Effects of Roads

- 1. EIAs of road projects are generally poor.
- 2. Landscape-scale effects of road networks are neglected in EIAs.
- 3. There is a lack of knowledge of thresholds in the cumulative effects of landscape fragmentation and habitat loss on the viability of wildlife populations.
- 4. Wildlife populations may have long response times to increases in landscape fragmentation (‘extinction debt’).
- 5. There are large uncertainties about many potential ecological effects of roads; they need explicit consideration in EIA, and decision-makers should more rigorously apply the precautionary principle.
- 6. Landscape fragmentation should be monitored because it is a threat to biodiversity and a relevant pressure indicator.
- 7. Maintaining ecological corridor networks is less costly than paying for their restoration at a later date.
- 8. Limits to control landscape fragmentation are needed.
- 9. Caring about the quality of the entire landscape is essential, not just protected areas and wildlife corridors.