Université catholique de Louvain

UCL

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Land use planning law, key instrument for biodiversity adaptation to climate change

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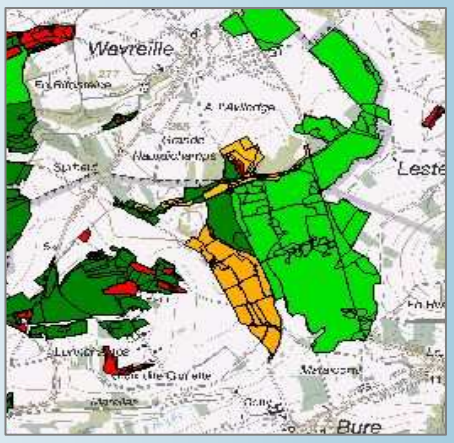


Overview

I. Biodiversity, climate change and spatial development

II. Land-use and development plans, powerful but double edged weapons

III. Natura 2000, an important but insufficient step towards integration

Conclusion

I. Biodiversity, climate change and spatial development

- Spatial distribution of biodiversity is shaped not only by natural factors but also by man, especially land use patterns → since XIXth century, radical changes → fragmentation, degradation of habitats, eutrophication, IAS,...

- Biodiversity will also soon face the effects of climate change, i.e.
  - impacts of changes in climatic conditions
  - impacts of human mitigation and adaptation strategies (coastal and river defenses,…)

→ Decline of many natural habitats types, specialized species (cf IUCN red list!)

→ Shifts in spatial distribution and range of biodiversity

Marbled Fritillary (Brenthis daphne), a new species for Belgium, probably due to global warming

→ Need for conservation *and* adaptation measures i.e. enhance resistance and resilience of ecosystems/pop°; improve connectivity; reduce other stresses

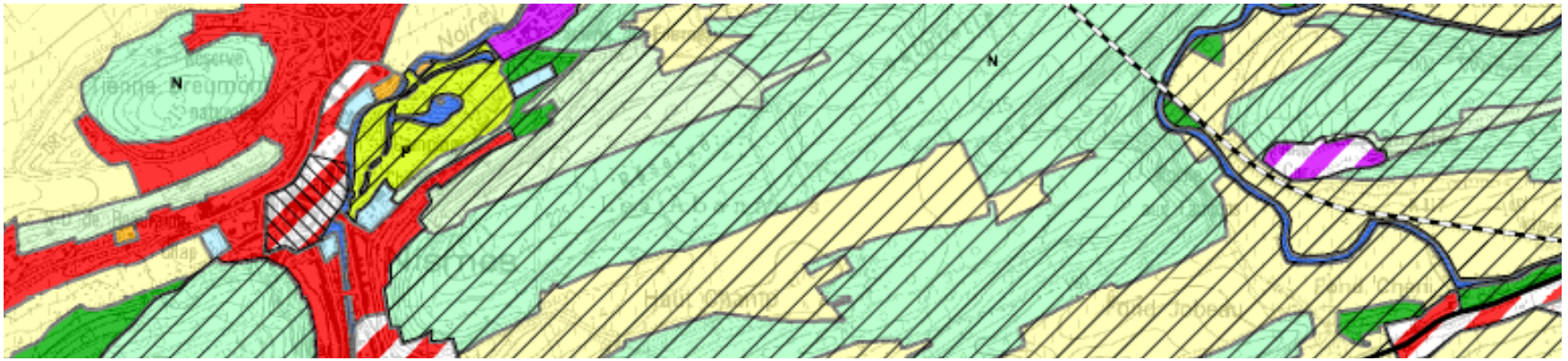
→ Need for a comprehensive, spatially-explicit and adaptive biodiversity conservation and adaptation strategy (BCAS) in a context of of high scientific uncertainty and scarcity of land resources

→ Importance of spatial dimension of BCAS !

→ How to translate this strategy into law ?

→ How does land use planning legislation and instruments interact with such strategy ?

→ How to ensure integration of such strategy into land use or development plans ?



II. Land-use planning, powerful but double edged weapon

2.1. Spatial development policy in WR: a key policy for controlling land use changes

- Multiples goals : aims at equitable and sustainable allocation of space to human activities → economic, social and environmental goals
- Based on a hierarchically-structured and multi-scale planning system, composed of:
  - Orientation plans (indicative)
  - Land-use plans (statutory)
  - Individual development grants or permits (statutory)

→ Multi-level decisional process controlling different categories of land uses (esp. construction) to achieve (sustainable?) spatial development policy goals

2.2. Land-use plans, powerful but double edged weapons : the example of « sector plan »

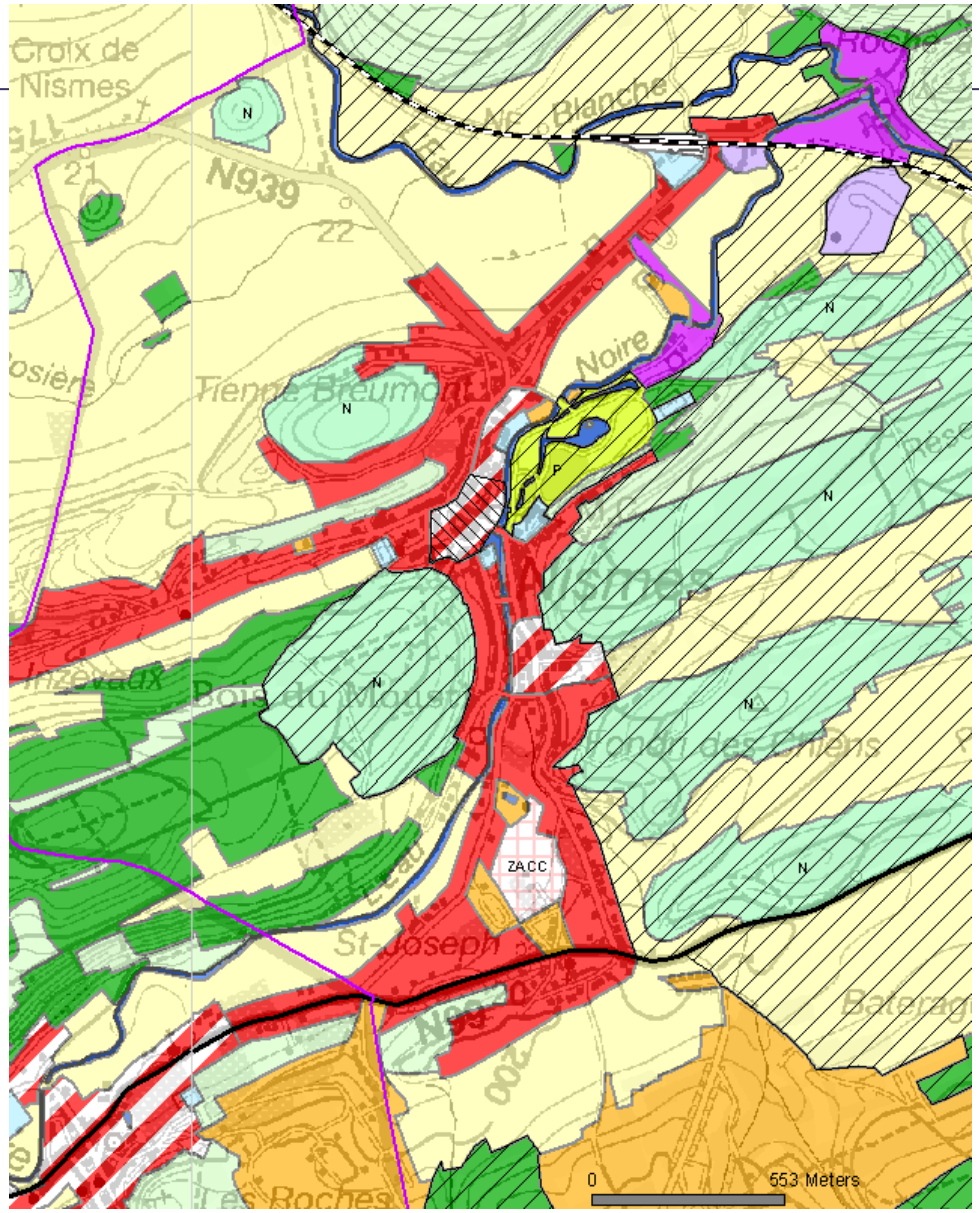
→ Impact on land use depends on:

- Content: combination of zoning and statutory prescriptions in order to allocate space to human activities → « tool box » including a.o.
  - Building zones (« extraction zones », …)
  - No build zones (including « natural zones », « ecological connection perimeters », etc.)
  - Exemption mechanisms
- Legal value: statutory → binding for any inferior decision (local plans, dev. grants)

→ Powerful but double edged weapon:

- Designed for orientating urbanization (incl. climate change mitigation infrastructures) → powerful potential for protection of ecological network (EN)
- But mostly development-orientated (70'-80'): → sector plans frequently have a severe (indirect) impact on the EN : destruction, fragmentation, degradation of habitats, …

→ Need to orientate the final decision in order to reach *compatibility with* or, better, to *support* EN



Sector Plan of Philippeville-Couvin in a high biological value area (1:25.000)

→ Need for better integration of biodiversity concerns into the LUP decisional process :

- Procedural aspects : necessity to
  - improve the quality of ecological information for designing new plans or reviewing existing plans :
    - SEA (2001/42/EC Dir.): no reference map of EN
    - Nature conservation agency consultation: not compulsory
    - Public and NGO participation: too late in the process
  - review existing plans to check compatibility with EN: not required by SEA Dir.; low flexibility due to rigid review procedure and property right protection contraints

- Substantive aspects :

  necessity to impose the protection of important landscape elements of the EN or to offset any significant loss → no such specific obligation in Walloon planning law

→ How to improve these flaws ?

→ Need for integration of specific BCAS planning and ecological standards into general development planning

III. Natura 2000, an important but insufficient step forward

3.1. Emergence of ecological planning

→ 1990-2000: emergence of ecological planning instruments for biodiversity:

- Natura 2000 Network (Birds and Habitats Dir.)
- Integrated water management (WFD)
- New Walloon Forest Code

→ Steps towards ecological network (EN) plan

→ Key for integration of ecological concerns into spatial development policy

→ Evolving role for spatial development policy :

- Support to PA system set up and management
- Protection of open lands for restoration/ enlargement of PAs and connectivity between PAs
- Control cumulative impact of urbanization on PA (buffer zones,…) and connectivity

→ Powerful support to nature conservation and water management policies

Probl:

- interactions between these policies : tradeoffs between space claims ? Supremacy of LUP ?
- how to integrate ecological dynamics considerations into rigid land use planning system and ensure legal certainty ?

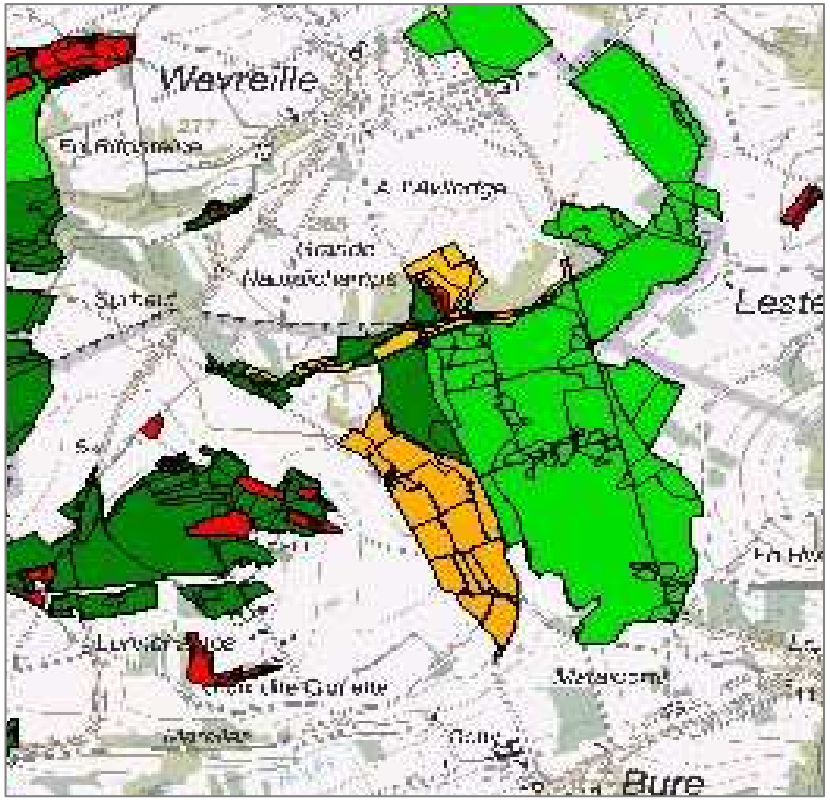
3.2. Natura 2000, an important but insufficient step towards integration

For the first time, MS must:

- classify extended land surface as PAs on their territory, based only on scientific criteria (ECJ, Case C-166/97 Seine Estuary; C-371/98 Severn Estuary)
- establish an integrated protection regime based on a combination of spatially-explicit and binding ecological standards (CO), EIA procedure and strict exemption mechanism, including compensatory measures → binding for any land use plan or development consent likely to have a significant effect

→ Revolution ! End of LUP supremacy on NC

Natura 2000 site « zoning » in Walloon Region (source: DEMNA)



Surface moyenne ~ 2 ha

Problem: is Natura 2000 scheme sufficient for implementing an efficient adaptation strategy to climate change ?

- N2000 Sites designation : rather static (needs presence of species/hab.) ; but possibility to make the network evolve where this is warranted by « natural developments » (art. 9 Hab. Dir.)
- N2000 protection: need for flexible conservation objectives and protection standards: art 6 § 2 too rigid ? No ; too rigid CO review procedure ? No, as climatic change are slow
- Connectivity: no specific binding provisions (art. 3.3 and 10), but art 6 § 2 includes dispersal needs protection (Case C-308/08, Iberic Lynx)

→ Legal possibilities of enhancing ecosystems resilience and connectivity

→ BUT:

- Scope of Natura 2000 restricted to CI species and habitats types → no obligation to maintain or restore FCS for non CI regionaly threatened species (except birds)
- No sites can be classified for restoration only (presence of species/hab. required)
- insufficient implementation, especially as regards the connectivity requirements and AIA procedures

→ Natura 2000 insufficient for implementing comprehensive BCAS

→ Responsability of MS to fill these gaps

Conclusion

I. Land-use planning has a key role in shaping landscapes and ecological infrastructure

II. Land use planning instruments are potentially powerful instruments for biodiversity conservation and adaptation to climate change

III. To ensure their contribution to BCAS, need for better ecological information and standards

IV. Natura 2000 is a efficient instrument for integrate biodiversity concerns into land use planning policy, but insufficient to implement full BCAS

Conclusion

IV. How to fully integrate BCAS concerns into development planning ?

A.o., need for specific integrated ecological planning for an adaptive and comprehensive EN at national level

→ Call for:

- an « integrated ecological planning » Framework Directive, including an EN planning obligation for MS according to Natura 2000 model
- integrate BCAS concerns into all EU ecological standards (air, water,…) and the adoption of new standards (soil, IAS,…)

Thank you for your attention