



LAND USE 2021: A PLACE
FOR BIODIVERSITY OFFSETS



Biodiversity
Offsets

8-PART WEB FORUM SERIES

APRIL 19 - JUNE 14, 2021
FREE REGISTRATION



UNIVERSITY OF ALBERTA
Alberta Land Institute

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Land Use: 2021 - No Net Loss in a Changing Landscape - Session #2

Presentation - Florence Damiens - RMIT University

Damiens, F. L. P., Backstrom, A. and Gordon, A. (2021) 'Governing for "no net loss" of biodiversity over the long term: challenges and pathways forward', *One Earth*, 4(1), pp. 60–74. doi: 10.1016/j.oneear.2020.12.012.

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'No net loss' objective: what are we assuming?

1) We are able to produce biodiversity gains

- Establishment
- Restoration
- Avoided loss

2) We can maintain these gains as long as the impacts remain

3) We can maintain these gains over the long-term/in perpetuity for long-term/irreversible impacts (which is the case for many developments generating offsets under conservation legislation)

Which ecological time frames are we talking about?

For a few examples of restoration & recovery time frames, see figure 1, Damiens et al. 2021.

What does this imply?

See figure 2, Damiens et al. 2021.

What tools have been promoted to recruit & retain offset gains over the 'long-term'?

Current offset policies : follow policy cycles, not ecological time frames

- Active management phase ~ 10-30 years
- Retainment phase ~ 50 years max. in practice (if any)
- Little to no planning beyond 30-50 years

Best practice guidelines:

- Securing the land ownership legally
- Securing the management (adaptive management plan, monitoring...)
- Securing payments for services (secure capital, secure safeguards for risks of financial or ecological failure, include monitoring of budgets, safeguards and guarantees)

Limits of current propositions

- **Governance:**
 - Additionality issue and intra-generational justice: Control, research and stewardship costs for conservation authorities and the civil society are not included
 - Additionality and inter-generational justice: Long-term costs not included
 - Extreme dependence on the current politico-economic system, while this system will transform itself or disappear over time (history + shocks of the Anthropocene)
- **Ecology:**
 - Management time frames not adapted to the ecological needs of different biodiversity surrogates
 - Do not consider specification, novel ecosystems and shocks of the Anthropocene
 - Existing pressures on natural resources will increase (is already affecting PAs)

Pathways forward

- Additionality & justice:
 - Internalize the control, research, and stewardship when estimating offset costs
 - Internalize also the long-term/permanent recruitment & retainment costs for long-term/permanent offset gains
 - Build the institutions that prioritize renouncement, avoidance and that make the public/private 'polluters' pay for the intra and intergenerational costs of their authorised damage
- Work on offset policies to:
 - Incorporate multidecadal and century-plus time frames
 - Plan for building the long-term social-ecological resilience and stewardship of offset sites:
 - Engage with the dynamic nature of future gains in the Anthropocene
 - Work with local stakeholders and their formal and informal systems of governance to ensure long-term stewardship (careful with additionality).
- Not easy? Normal. Modern Western systems of governance are not built to deal with the long-term consequences of present impacts.



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Thank you!

Next: Eric Higgs

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