

Voluntary offsets as a mechanism for financing habitat conservation

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Proximate causes of biodiversity loss

- “Habitat loss is identified as a main threat to 85 per cent of all species described in IUCN Red Lists.... Deforestation is one of the leading causes of habitat and biodiversity loss.” (IUCN 2000: <http://www.iucn.org/bil/bioloss.html>)
- “Fragmentation, degradation, and outright loss of forests, wetlands, coral reefs, and other ecosystems ... poses the gravest threat to biological diversity.” (CBD Secretariat: <http://www.biodiv.org/doc/publications/cbd-sustain-en.pdf>)

Mitigation hierarchy and offsets

1. Avoid
2. Minimize
3. Mitigate / Compensate / Offset
 - on-site restoration
 - off-site and in-kind
 - off-site and out-of-kind
 - conservation banking
 - tradable development rights

Declining cost



Wetland and Conservation Banking in the USA

Wetland Banking (Clean Water Act)

- Aim for “no net loss” of wetlands as result of land development
- For every hectare of wetland destroyed, a hectare (or more) of comparable wetland must be restored or re-created
- As an alternative to on-site mitigation, developers can purchase “credits” from approved mitigation bankers for similar wetlands within a specified “service area”

Conservation Banking (Endangered Species Act)

- Aim to ensure recovery of threatened and endangered species by securing habitat
- For every hectare of habitat destroyed, developers must pay compensation
- Compensation may involve the purchase of credits from approved conservation bankers, or “in-lieu-fee” payments to environmental agencies to support species conservation efforts in the service area

Growth of wetland banking in the US

Indicator	1992/93	2001/02
Approved banks	46	219
Wetlands restored	7,151 ha	56,638 ha
Participating states	18	40
Size of banks (% > 40.5 ha)	35%	57%
Privately owned commercial banks	1	135

Source: Wilkinson, J. and C. Kennedy. 2002. *Banks and Fees: The status of off-site wetland mitigation in the United States*. Environmental Law Institute: Washington, D.C.

Habitat compensation around the world

- **Netherlands** Ecological Compensation Programme: developers who damage habitat are required to offset this damage through protection of three times the original area in the same zone (OECD, 1996, cited by Landell-Mills and Porras, 2002).
- **Switzerland** Federal Law for Protection of Nature and Landscape: mandates “reconstitution” or “replacement” of protected biotopes where impacts are unavoidable. (www.admin.ch/ch/f/rs/451/a18.html)
- **Brazil** Legal forest reserves: “regulations require each rural property to maintain a forest reserve of at least 20%, but nascent policies allow some tradeability of this obligation.” (Chomitz *et al.*, 2003)
- **Australia** Green Offsets pilot programme: “if a new development increases [water] pollution in an area, the developer takes action to cut other sources of that type of pollution nearby.” (<http://www.epa.nsw.gov.au/ministerialmedia/0803/index.htm>)
- **UK** position on EU Birds and Habitats Directives: “Where the importance of the development is judged to outweigh the nature conservation importance of the site, compensatory habitat measures must be taken to maintain the coherence of the Natura 2000 network.” (<http://www.defra.gov.uk/wildlife-countryside/ewd/ewd09.htm>)

Pre-requisites of biodiversity offsets

1. Land developers are obliged or volunteer to mitigate the unavoidable impacts of their activities on natural habitat
2. Environmental authorities (and the public) accept the principle of off-site compensation and transfer of liability
3. Environmental managers / entrepreneurs can provide adequate offsets at reasonable cost

References: TDRs and compensating projects

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