

From tracks to thresholds

What MDBs need from a Migration Atlas for critical habitat determination

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Where infrastructure meets migration



MDBs finance roads, rail, hydropower, transmission, ports and wind



Many are linear or barrier-forming, sited where movement concentrates



Lending is conditional on environmental and social standards

Standards are where biodiversity data become binding.



Infrastructure over a living reef, Solomon Islands. Photo: F. Ricciardi

Critical habitat: eight criteria

ADB ESS6. Thresholds adapted from the IUCN Key Biodiversity Areas Standard

1

Threatened species

2

**Geographically
restricted species**

3

**Migratory or
congregatory
species**

≥1% of global population,
regularly; ≥10% under
environmental stress

4

**Threatened
ecosystems**

Includes free-flowing
rivers <500 km, e.g.
swimways

5

**Key evolutionary
processes**

6

**Geographically
restricted
ecosystems**

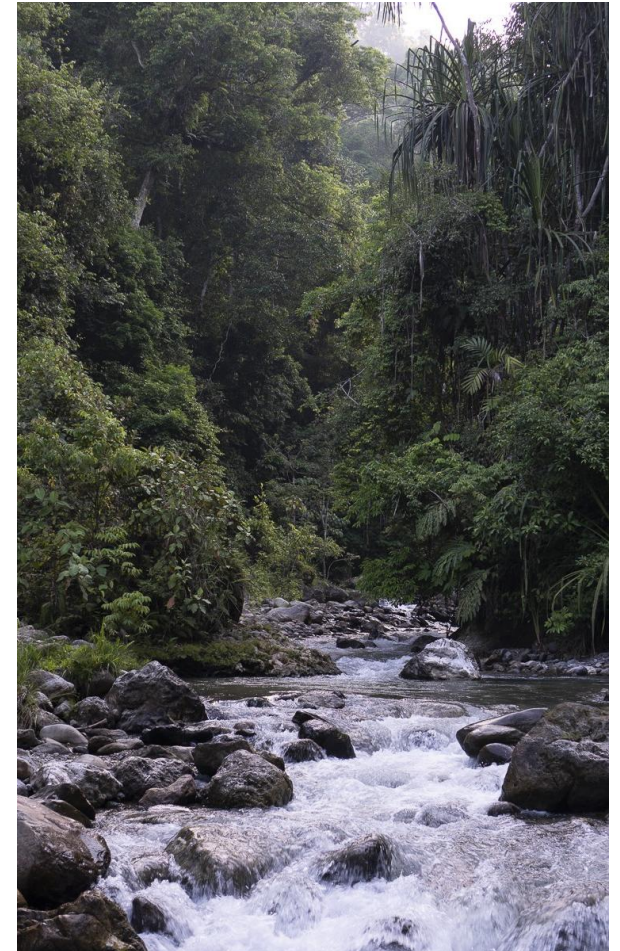
7

**Geographically
restricted
assemblages**

8

**Ecological function
and connectivity**

No quantitative threshold:
expert judgment



Free-flowing rivers sustain connectivity. Photo: F. Ricciardi

Critical habitat can occur in natural and modified habitats (GN17.1, GN21.1)

When it is critical habitat, siting changes

Adverse impacts allowed only if all are met (ESS6 para. 22)



No viable alternative exists



Lawful, including international obligations



Stakeholders consulted (ESS10)



Net gain for the features that triggered it



No measurable residual impact on other priority features



No ADB financing in

Alliance for Zero Extinction sites

World Heritage Sites

Free-flowing rivers ≥ 500 km

ESS6 para. 23, except as provided in para. 24

“

Migration corridors such as those recognized by the Convention on Migratory Species (CMS) should be considered critical habitat.

ADB ESS6 Guidance Note, Table 1, note i

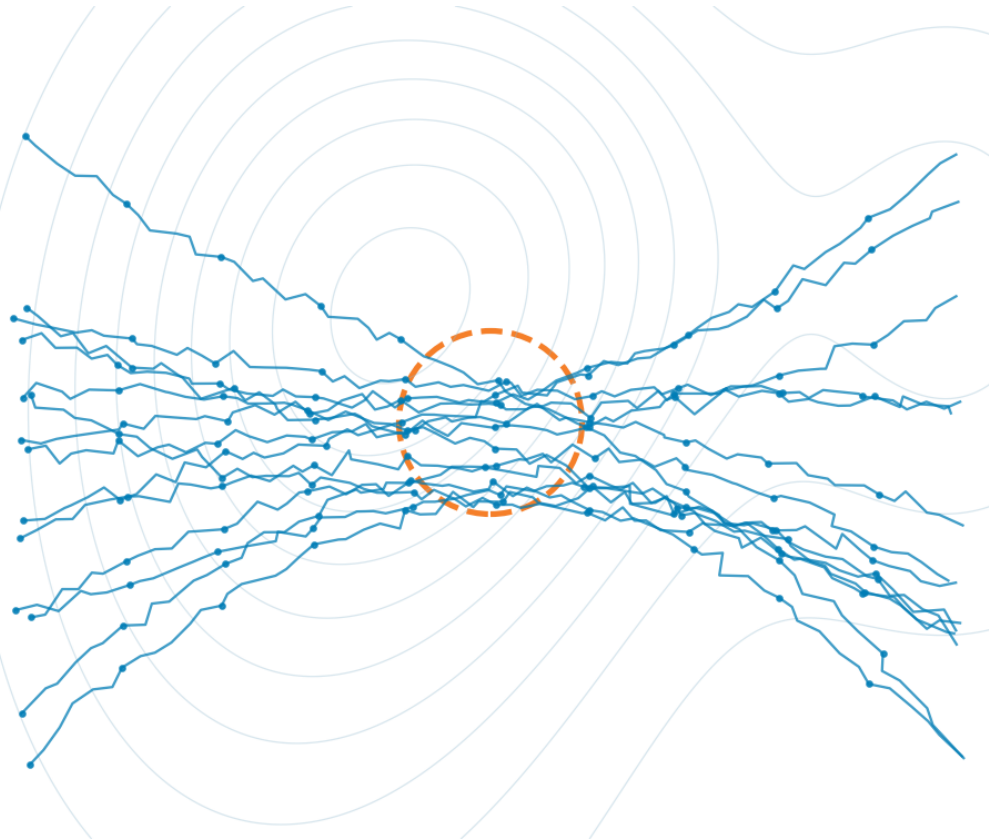
To our knowledge, the first MDB critical habitat guidance to recognise CMS corridors.

Atlas layers can become regulatory triggers.



ESS6 Guidance Note, December 2025

Tracks are not thresholds



Tracks show where and when

Thresholds ask how many, how regularly

$\geq 1\%$

of the global population, regularly

$\geq 10\%$ during environmental stress

Criterion 8 has no threshold and rests on expert judgment

What we need, by project stage



Screening

Global, coarse, fast
layers at concept stage



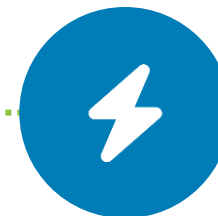
Scoping

Corridor extent,
seasonality,
bottlenecks



Assessment

Population proportions
and regularity across
years



Impacts

Crossing points,
passage timing, flight
altitude



Monitoring

Baselines for adaptive
management

Project baselines often cover one or two seasons; the Atlas can supply the longer view.

Making data usable in a decision



Confidence classes

Explicit data-quality rating for each layer



Provenance and versioning

Determinations traceable to a dated source



Usable licensing

Open to borrowers and their consultants



GIS-ready formats

Compatible with IBAT and screening tools



Sensitive locations

Managed disclosure for persecuted species



Explicit criteria

Which features meet which thresholds

Four proposals

- 1 A decision-grade tier aligned with KBA and critical habitat criteria
- 2 Population proportions attached to corridor segments
- 3 Project survey and tracking data flowing back into the Atlas
- 4 Coverage prioritised where development pressure is highest

The Atlas can shape where infrastructure goes. Let us build it for that purpose.

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Thank you!



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