

Biodiversity Planning Technical Guidelines: Key outcomes of November 2012 workshop

10th Biodiversity Planning Forum

9 May 2013

Golden Gate National Park



Overview

- Background
- High-level CBA and ESA framework
- CBA criteria
- ESA criteria
- CBA and ESA categories
- Couple of other issues
- Way forward

Background

- Nearly all provinces and metros have a biodiversity plan
 - Basis for bioregional plans published in gazette
 - CBAs link to EIA regs and mining sensitivity map
- Lots of innovation over many years
- Development of the fruit salad map highlighted the need for a degree of consistency
 - Especially re what we mean by CBAs and ESAs

Definitions – Guideline for Bioregional Plans

- Critical Biodiversity Areas
 - Areas that are required to meet biodiversity targets
- Ecological Support Areas
 - Areas that are not essential for meeting biodiversity targets, but that plays an important role in supporting the functioning of CBAs and/or for delivering ecosystem services

High-level framework for CBA maps

Map category	Land management objective	Land-use categories/guidelines
Protected areas	--	--
CBA	Natural/near-natural	... (province-specific)
ESA	Functional	... (province-specific)
Other natural areas	--	--
No natural habitat remaining (heavily modified areas)	--	--

CBA

MUST BE INCLUDED

Irreplaceable sites
Irreplaceable features
Sites with high selection frequency
Best design sites for a range of biodiversity features – best options for meeting targets

Nationally listed CR ecosystems based on Criterion A

National priority estuaries that require full protection
Flagship free-flowing rivers

OPTIONAL

Critical linkages: sites that are irreplaceable for connectivity – landscape or local scale
River FEPAs (otherwise must be ESAs)
Wetland FEPAs (otherwise must be ESAs)

Unique biodiversity pattern features
CR, EN, VU & rare species – non-mobile species for which there is point data (Criteria B, C, D: all populations
Criterion A: certain number of populations)
Modelled CR, EN & VU species (part of cost surface OR low target)

ESAs

MUST BE INCLUDED

River FEPAs – those that aren't CBAs

Landscape-scale corridors (for connectivity)

Wetland FEPAs – those that aren't CBAs

Local-scale corridors (for connectivity)

Non-flagship free-flowing rivers

National priority estuaries that require partial protection

All other estuaries(?)

OPTIONAL

Species-related ESAs
(e.g. nesting sites, foraging areas)

Areas where species management
issues are NB (may be highly modified
habitats, can be shown as overlay)

ESAs linked to marine CBAs (have
specific land management guidelines)

Climate change refugia

EN ecosystems listed nationally under
Criterion A and not selected elsewhere

VU ecosystems listed nationally under
Criterion A and not selected elsewhere

Indigenous forests

- Use DAFF forest types
 - Different from Mucina & Rutherford forest types
- Use DAFF targets for forest types
- Optional: include forest patches from DAFF forest conservation plan as e.g. unique habitats
- NB: Do not set a blanket target of 100% or 60% for all indigenous forests
- Destruction of forests is subject to a permit – similar to removal of natural vegetation requiring an EIA. We need to say which forests are most NB in order to guide the permitting process.

Species targets

- Use Pfab, Victor and Armstrong 2011 as a guide

Biodivers Conserv (2011) 20:1001–1012
DOI 10.1007/s10531-011-0009-0

ORIGINAL PAPER

Application of the IUCN Red Listing system to setting species targets for conservation planning purposes

Michèle F. Pfab · Janine E. Victor · Adrian J. Armstrong

Received: 7 June 2010 / Accepted: 31 January 2011 / Published online: 19 February 2011
© Springer Science+Business Media B.V. 2011

Abstract Biodiversity targets, or estimates of the quantities of biodiversity features that should be conserved in a region, are fundamental to systematic conservation planning. We propose that **targets for species should be based on the quantitative thresholds developed for the Vulnerable category of the IUCN Red List system**, thereby avoiding future listings of species in an IUCN Red List threat category or an increase in the extinction risk, or ultimate extinction, of species already listed as threatened. Examples of this approach are presented for case studies from South Africa, including threatened taxa listed under the IUCN Red List criteria of A to D, a species listed as Near Threatened, a species of

CBA & ESA categories on the final map

- CBA irreplaceable*
- CBA optimal (OR CBA important)
- CBA estuary
- CBA critical linkage / irreplaceable linkage
(OR this can be a subset of CBA irreplaceable)
- ESA terrestrial
- ESA aquatic
(OR could have more ESA categories)

* Includes sites with high selection frequency – threshold should ideally be related to land hungriness (75-80%?)

Other issues discussed

- Ecological condition classes – need more work on coming up with a consistent framework and categories
- Overlaps between categories vs categories that **MUST** be mutually exclusive
 - PAs should never overlap with CBAs or ESAs
 - ONA should never overlap with CBAs or ESAs
 - CBAs and ESAs may sometimes overlap with each other

Terminology issues

- Biodiversity planning vs conservation planning
- Transformation / transformed
 - Rather use “highly modified”

Way forward

- Annual indepth work session for provincial and metro biodiversity planners
- Small group to work on ecological condition framework and classes → develop a proposal
- More discussion on edge-matching – Mervyn to provide best practice guidelines
- More discussion with Tilla and others re species targets
- Fahiema to draw up draft set of GIS rules
- SANBI to lead development of technical guideline document