

SANBI

Biodiversity for Life



Wetland Offsets

grasslands
LIVING IN A WORKING LANDSCAPE



Dr Stephen Holness

Conservation Planning

sholness@nmmu.ac.za

**Stephen Holness on behalf of
SANBI and team**

Talk outline

- Wetland offsets purpose and place in the mitigation hierarchy
- Where wetland offsets fit into broader offsets policy development
- Content of the best-practice guideline for wetland offsets in South Africa
- Current revisions
- Technical & political approval process

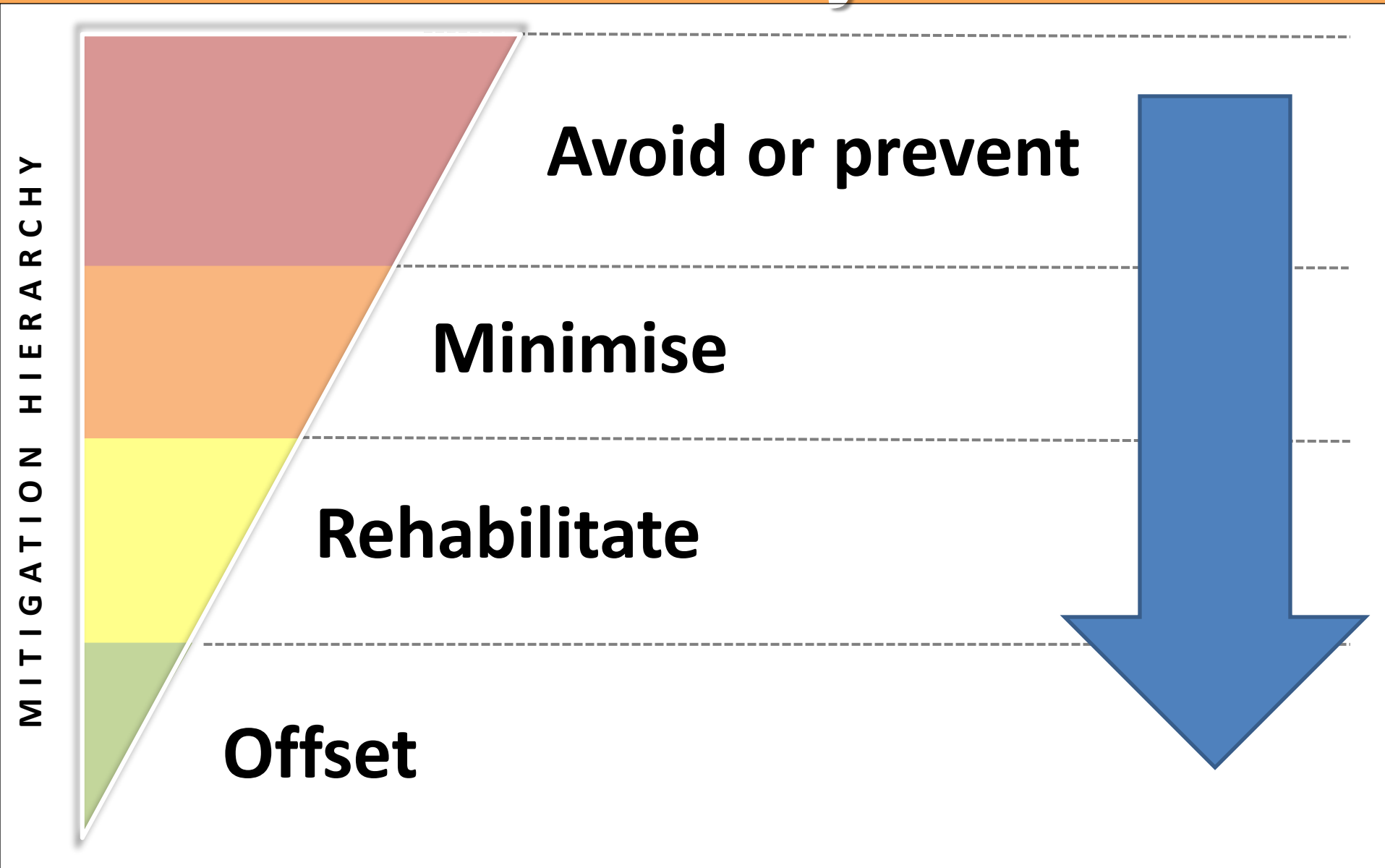
The offsets definition we are using

- “Biodiversity offsets are ***measurable conservation outcomes*** resulting from actions designed to ***compensate for significant residual adverse biodiversity impacts*** arising from project development after appropriate prevention and mitigation measures have been taken.” (Business and Biodiversity Offsets Programme , 2009)

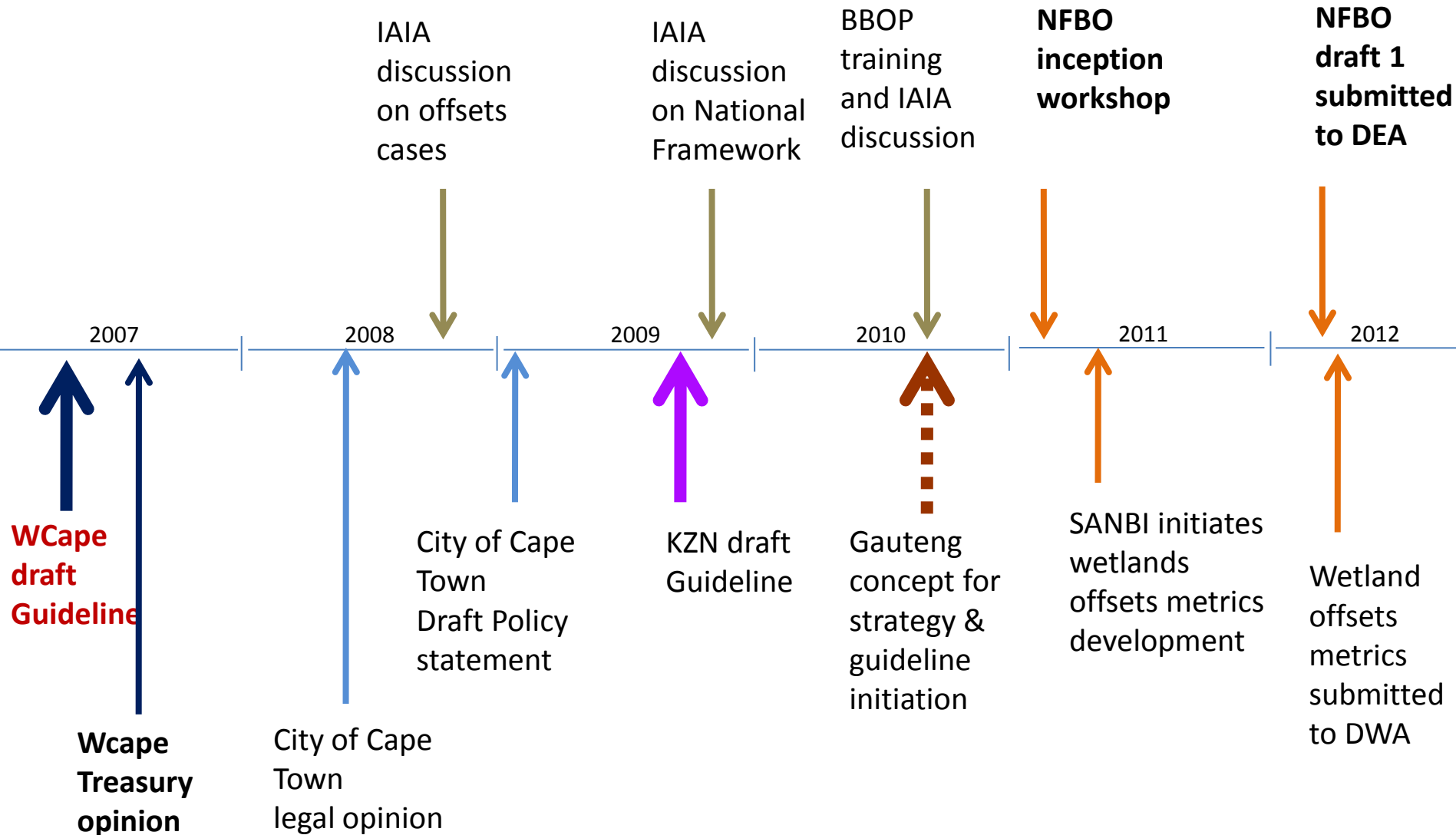
Overall purpose

- The goal of biodiversity offsets is to achieve ***no net loss*** and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.” (BBOP, 2009)

The place of offsets in the mitigation hierarchy



Wetland offsets are part of broader offsets policy development



Wetland offset policy goals in South Africa

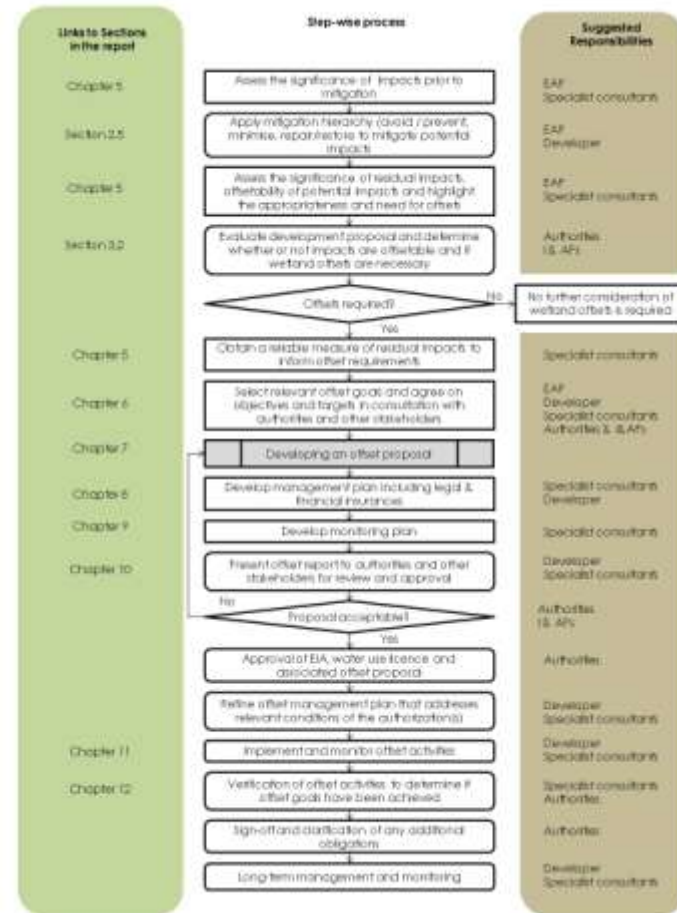
1. Formally protecting wetland systems in a good condition so as to contribute to meeting national conservation targets;
2. No net loss in the overall wetland functional area by providing gains equivalent to residual impacts;
3. Providing appropriate and adequate compensation for residual impacts on key ecosystem services;
4. Adequately compensating for residual impacts on threatened or otherwise important species.

Principles

- Adherence to the mitigation hierarchy
- Limits to what can be offset
- Catchment context
- No net loss
- Account for risks and uncertainties
- Additionality of conservation outcomes
- Enduring conservation outcomes
- Stakeholder participation

Wetlands offsets document - contents

- Wetland offsets document sets out clear practical guidelines for implementing wetland offsets in a consistent way
- Increase predictability of offset implementation
- Designed to fit in with broader national policy
 - Not in itself a policy document



Design and implementation of offsets

- Step-by-step process guide
 - Assessment of impact
 - Reporting into EIA process
 - Acceptable offsets
 - Identifying Offset Receiving Areas
 - Securing land
 - Assessing financial implications

Required offsets



Conservation significance

How important is the wetland in contributing towards conservation goals?



Ecosystem services

What are the key services that the wetland provides and to what extent will these be negatively affected?



Wetland condition

What is the current state of the wetland, and to what degree will the development cause further degradation?



Key species

Are threatened and other important species associated with the wetland and to what degree are they likely to be impacted?



Calculator & ratios (1)

Determining wetland offset targets

Descriptive information	Wetland reference	Impacted Wetland "A"		Objectives and Targets	
	Wetland Type and associated Threat Status	Mesic Highveld Grassland Group 2_Unchannelled valley-bottom wetland	EN		
	Wetland Vegetation Group and associated Threat Status	Mesic Highveld Grassland Group 2	CR		
Determination of wetland offset targets	Wetland size (ha)	10		Wetland Protection	Wetland Functional Area
	PES Score (Prior to development)	3.36			
	PES Category (Prior to Development)	C			
	PES Score (Anticipated following development)	8.57			
	Wetland Protection multiplier (From "Threat Status" tab)	30			
			Offset Targets (hectare equivalents)		156.30



Calculator & ratios (2)

Assessing potential gains

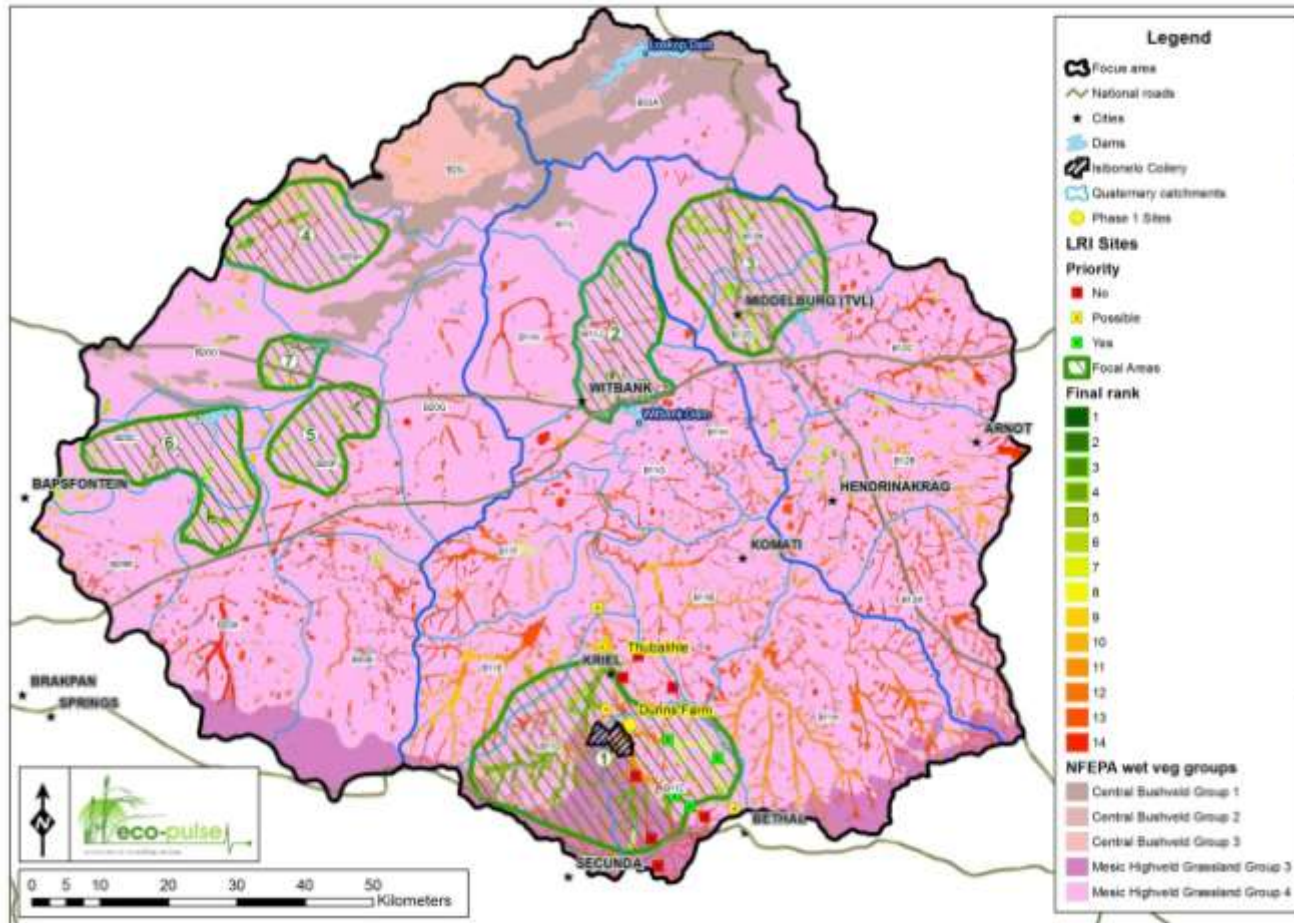
Descriptive information	Wetland Reference	Offset site 1		Objectives			
	Wetland Type and associated Threat Status	Mesic Highveld Grassland Group 2_Urchannelled valley-bottom wetland	EN				
	Wetland Vegetation Group and associated Threat Status	Mesic Highveld Grassland Group 2	CR				
Preliminary assessment	Types of offset activities proposed	Rehabilitation / Restoration & Protection		Wetland Protection	Wetland Functional Area		
	Wetland size (ha)	50					
	PES Score (Starting Condition)	4					
	PES Category (Starting Condition)	D					
	Is the condition of the wetland as good / better than that of the impacted site prior to development (or at least B PES Category in the case of largely un-impacted wetlands)						
	Is the Starting Condition more than one class lower than the impacted wetland?	No					
	PES Score (Anticipated in the absence of offset activities)						
	PES Score (Anticipated following successful offset implementation)	1.5					
	PES Category (Anticipated following successful offset implementation)	B					
	Is anticipated PES Category at least the same as that of the impacted wetland?	Yes					
Preliminary contribution to offset targets (hectare equivalents)				42.50	12.50		
Refinement based on multipliers	Multiplier	Attribute		Adjustment factor			
	Timing of offsets	Delayed (2-5 years)		1.5	1.5		
	Risk of offset failure	Rehabilitation / Restoration & Protection		1.5	1.5		
	Adjusted contribution to offset targets(hectare equivalents)				18.89	5.56	



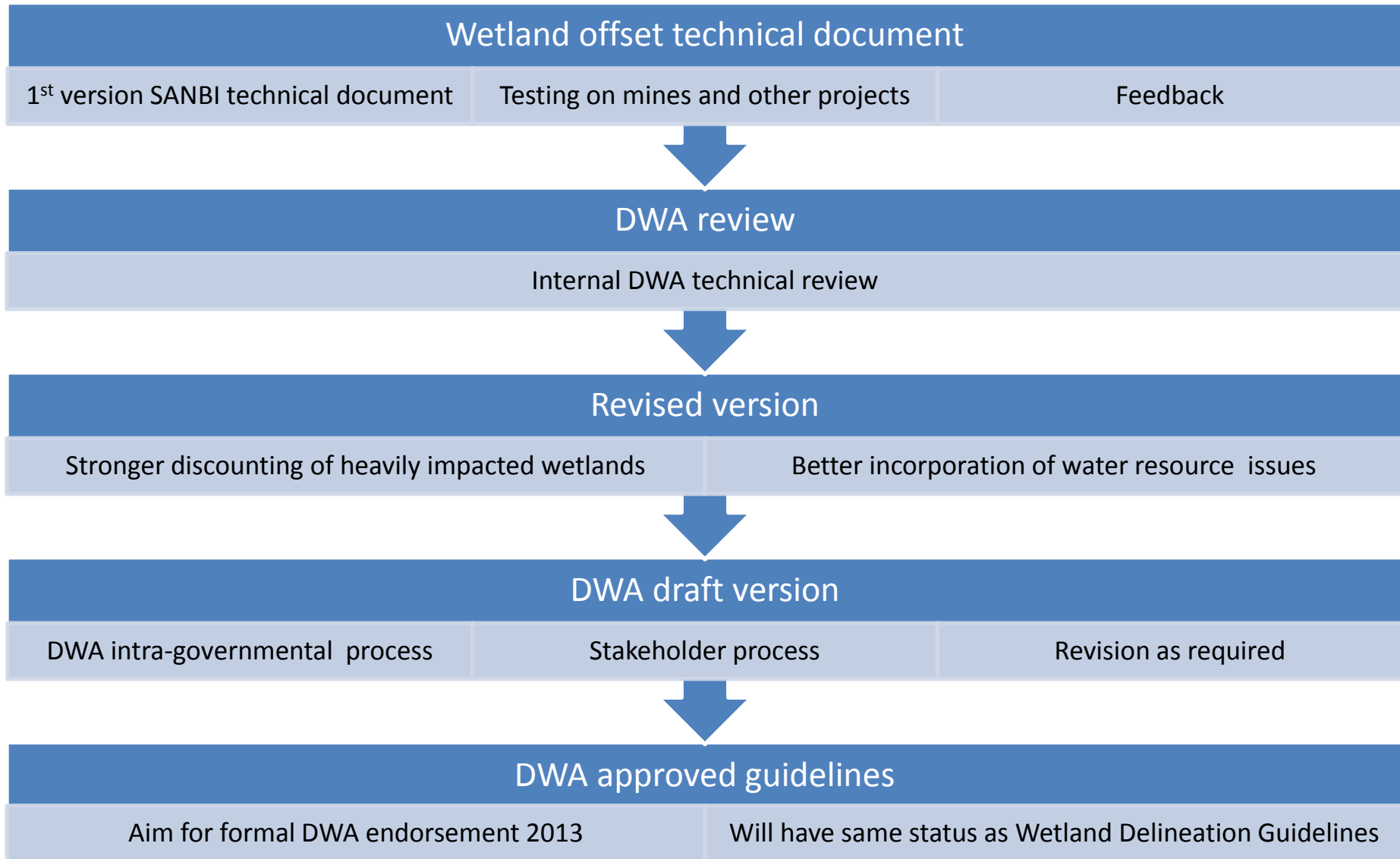
Ways of achieving wetland offsets



Offset receiving areas



Revision & approval process



Key messages

1. Offsets are the last stage in the application of the mitigation hierarchy to compensate for significant residual impacts
2. Wetland offsets are part of the national biodiversity offsets policy development process, including alignment of goals and principles
3. Wetland offsets document sets out clear practical guidelines for implementing offsets in a consistent way
4. Anticipated to become an official DWA guideline in late 2013

Thank you

- Wetland offset guideline available on request from sholness@nmmu.ac.za

