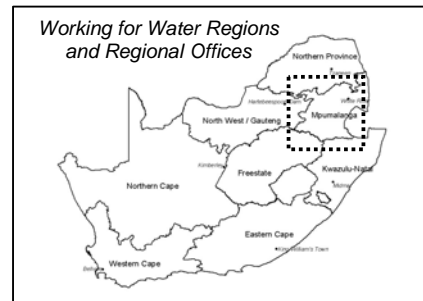


## WORKING FOR WATER REGIONAL STRATEGIC PLAN, AREA MANAGEMENT PLANS & MANAGEMENT UNIT CLEARING PLANS

The following provides a brief diagrammatic representation of

- Regional Strategic Plan,
- Area Management Plan, and
- Management Unit Clearing Plan.

Although, Mpumalanga has been used as an example here, the principle apply's to all regions.



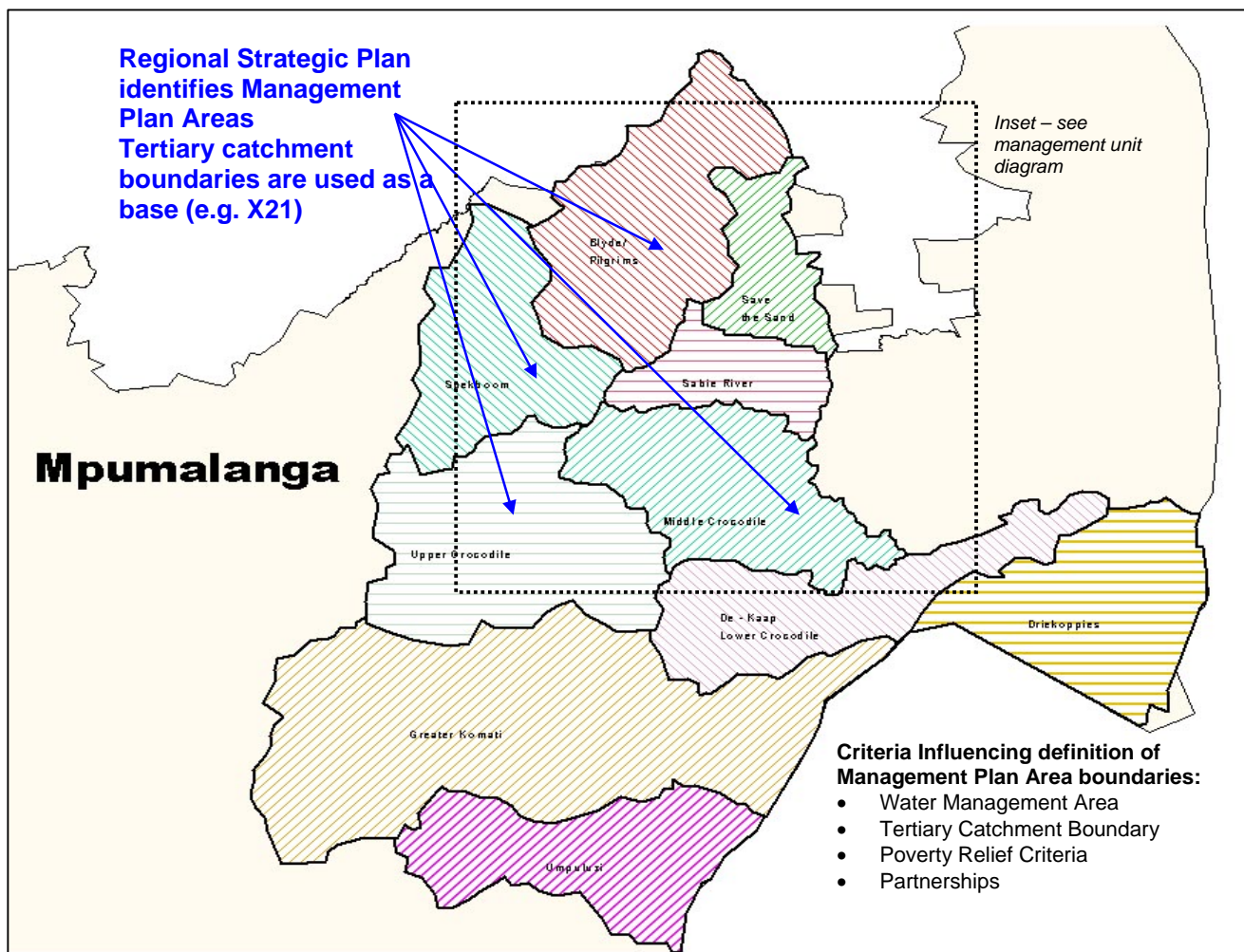
### REGIONAL STRATEGIC PLAN

Regional Strategic Plan covers the whole region and provides the framework within which all operations should take place in the region.

It should be drawn up in a consultative process with all relevant stakeholders in the region (government, NGO, community groups, environmental groups etc), through the Provincial Liaison Committee.

The Regional Strategic Plan is reviewed from time to time.

The Regional Strategic Plan sets out the different Management areas in the region and their boundaries. (illustrated below). Area Management Plans have to be prepared for each of the Management Areas.



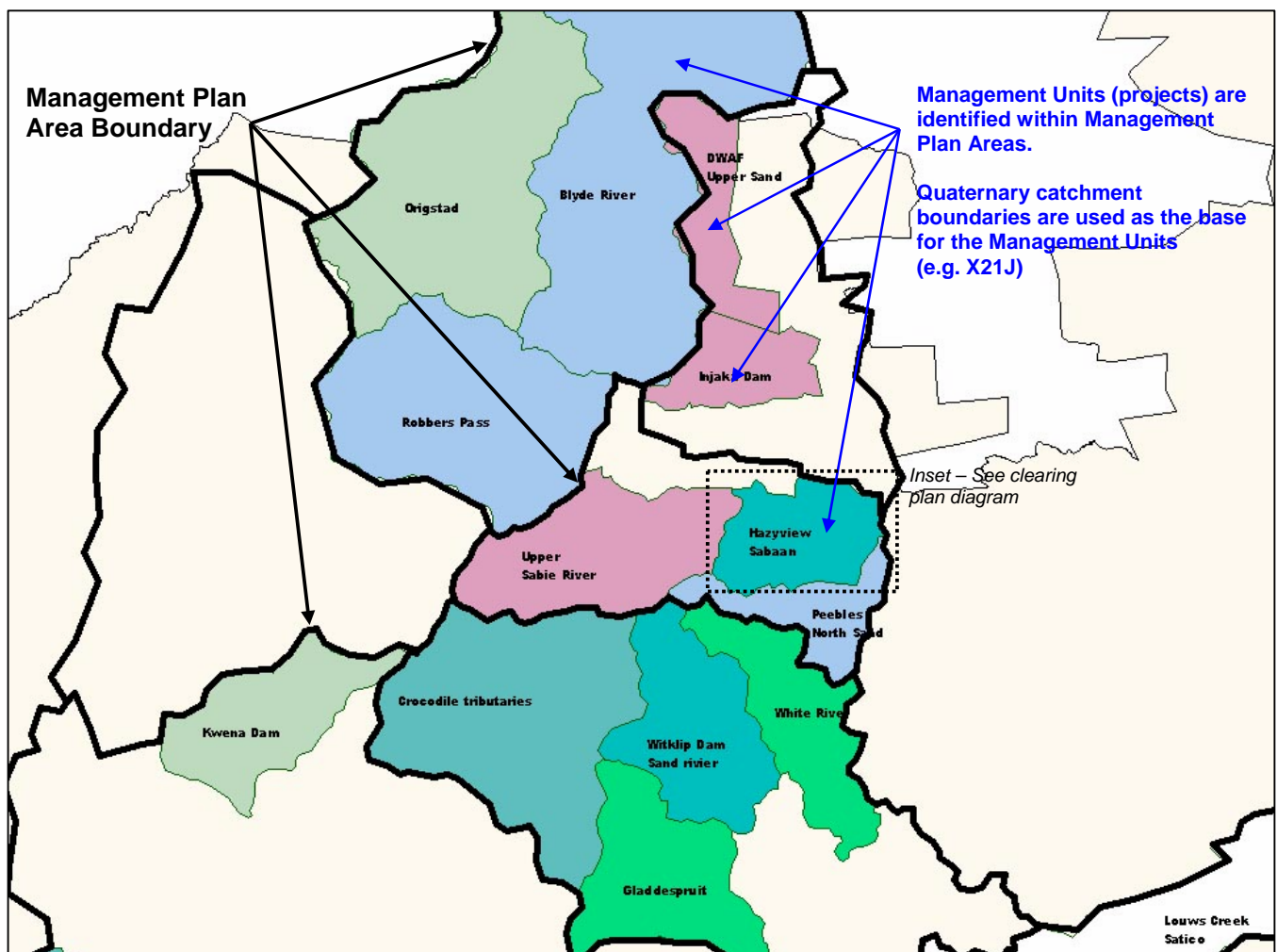
## AREA MANAGEMENT PLAN

Area Management Plans contain less strategic and more operational information. It will provide detail on how all activities in the Area will conform to the Regional Strategic Plan.

The Area Management Plan sets out the different Management Units in the Area and their boundaries. (illustrated below). Criteria influencing definition of Management Unit boundaries:

- Change in Species
- Project Size
- Change in River System
- Poverty Relief Criteria
- Partnerships
- Water users in Trading Account projects

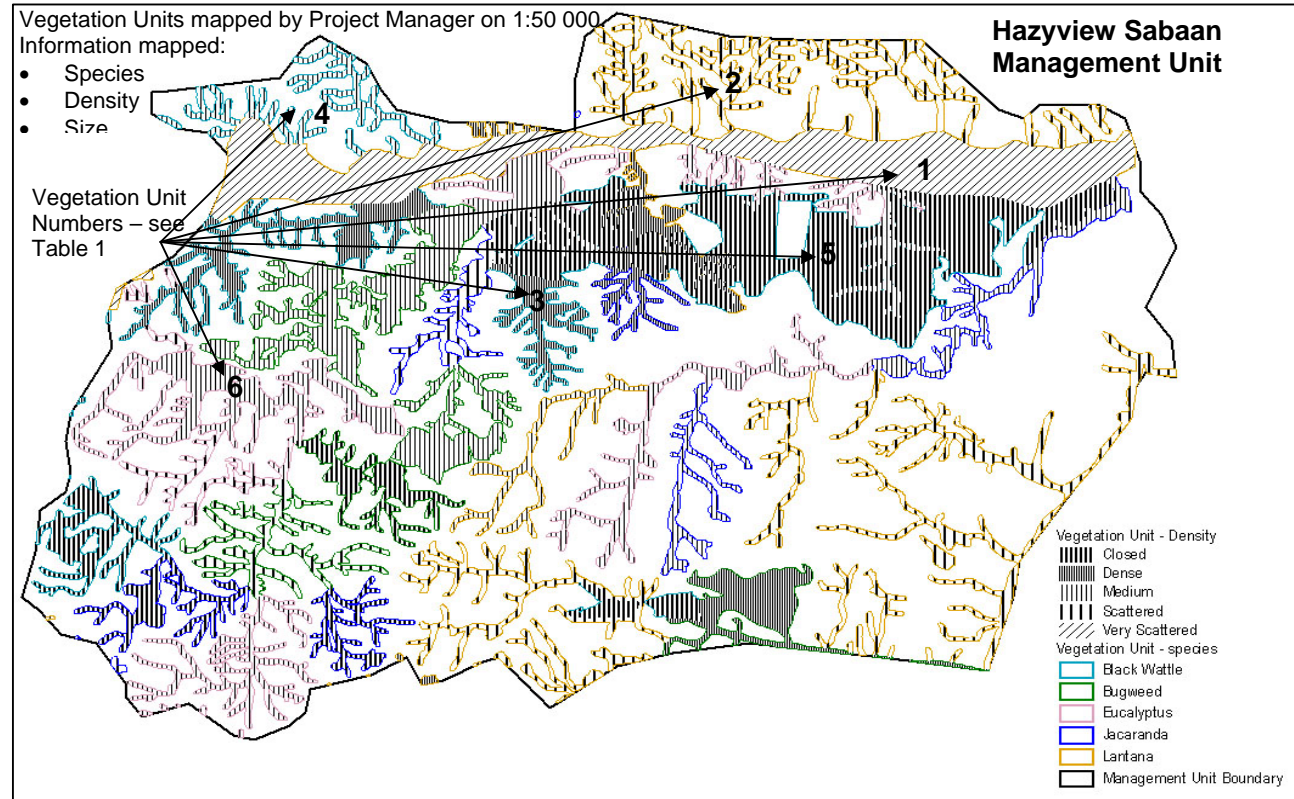
A Management Unit Clearing Plan must be prepared for each Management Unit identified.



## MANAGEMENT UNIT CLEARING PLAN

Should detailed NBAL mapping not be available, vegetation Units (precursor to NBAL's) must be mapped by the project manager on 1:50 000 topographic maps.

A Management Unit Clearing Plan focuses strongly on operational information and the clearing strategy in that particular unit. It will record the extent, density and maturity of all alien plant invasions within the management unit boundary.



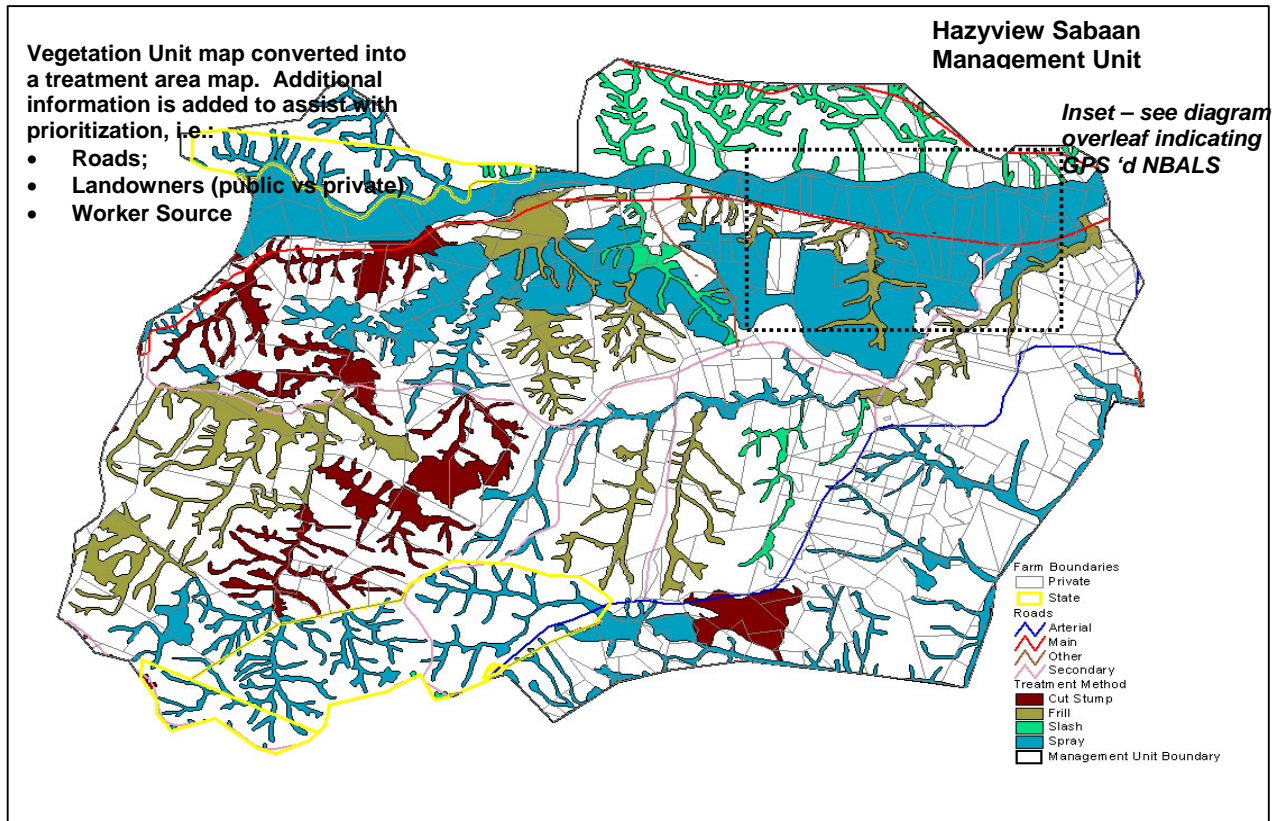
The Management Unit Clearing Plan must be used by project managers to plan their clearing operations and draw up APO's.

For each vegetation unit the treatment method must be identified. The order in which the different vegetation units will be cleared must be determined using the principle of “cheapest method” or the most “cost effective treatment method” first, e.g. follow-up or spray operations before frill or cut stump.

In order to do this, a “treatment method map” must be prepared from the vegetation unit map. The treatment method map should not use classifications such as “initial” or “follow-up” clearing, rather the actual clearing method must be used, i.e. spray, cut stump, frill etc.

The treatment method map with additional planning information will assist Project Manager's determine what clearing should take place first, based on the prioritization of the most cost effective clearing method first.





Using the Vegetation unit & treatment method map, the project manager must prepare a table listing all vegetation units, the species, density and size classification. An example of this table is given in Table 1 below.

By applying the personday norms to vegetation units and using the average cost per personday the total amount of money required to clear the catchment can be calculated, as well as the expected employment.

**TABLE 1: Vegetation Unit List (refer to first treatment method map for Vegetation Unit reference number)**

Veg Unit #	Species	Extent (ha)	Density	Size	Tr_Method	Pday Norm	Total Pdays	Cost / Pday	Total Cost	Priority
1	Lantana & Bugweed	500	V Scatt	Adult	Slash	5	2500	R40	R100 000	2
2	Lantana	100	Scatt	Seed	Spray	2	200	R50	R10 000	1
3	Black Wattle	60	Dense	Adult	Frill	8	480	R50	R24 000	3
4	Black Wattle & Bugweed	100	Medium	Young	Cut Stump	10	1000	R60	R60 000	5
5	Black Wattle	300	Closed	Seed	Spray	15	4500	R40	R180 000	1
6	Eucalyptus	150	Medium	L Adult	Cut Stump	40	6000	R80	R480 000	5
	<b>Etc</b>									
	<b>TOTAL</b>	<b>xxx</b>					<b>xxxx</b>		<b>Rxxxx</b>	

Once the table has been prepared, the vegetation units must receive a priority rating. The criteria for this prioritization should be based on the most cost effective clearing method, working from top of catchment down, Scattered vs Dense invasions, landowner participation. It will allow project managers to either add or subtract vegetation units from the APO depending on the budget received/expected.

Table 1, the list of Vegetation Units, will give an indication of the total number of hectares to be cleared in the catchment as well as the total amount of money required to get on top of the problem. It is not feasible to do all the work in one year, the project manager must then use the priority rating (as is set out in Table 1) to determine a timeframe within which the clearing can be done.

The timeframe will show how the work will be phased over any number of years and the level of funding which will be required.

Depending on the project priorities as defined in the Area Management Plan (e.g. either direct water benefit or poverty alleviation), the clearing may need to be implemented over a shorter period of time. An example of such a timeframe is set up in Table 2.

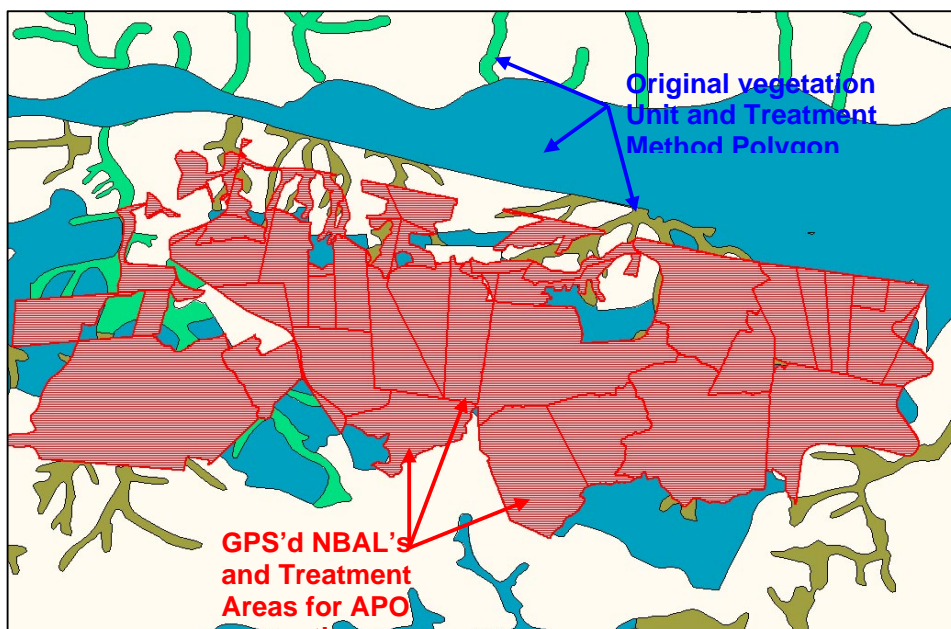
**TABLE 2: Clearing Plan Implementation Time Frame (derived from Table 1)**

Treatment Method	Year						
	1	2	3	4	5	6	7
	R'000						
Spray	1,000	2,000	3,000	500	500	300	250
Slash	1,500	1,000	200	200	200	200	200
Frill	100	600	400	200	300	200	200
Cut Stump	0	0	1,500	500	500	200	0
<b>Total Cost</b>	<b>2,600</b>	<b>3,600</b>	<b>5,100</b>	<b>1,400</b>	<b>1,500</b>	<b>900</b>	<b>650</b>
Total Person days	5000	5000	7000	7000	7000	4000	3000

Budget's can then be allocated to the projects based on these timeframes and APO's are drawn up within this framework.

#### Implementation Comments:

It is accepted that the broad level vegetation mapping done for this exercise will not be without its limitations in terms of determining cost to clear the whole project over a number of years. It will however allow a more strategic approach to budget allocation and will be the first step towards getting project managers to plan correctly. The mapping can be refined over time.



The clearing plan should be seen as a dynamic plan constantly in need of management and updating. It should form the focus of a project manager's activities. The clearing plan will be updated with treatment information once it has taken place – i.e. NBAL's and Treatment methods, as this will impact on the initial prioritization of vegetation units (e.g. a cut stump will become a spray operation on followup).

In the example provided, GPS'd NBAL mapping for contracts is overlaid on the

original vegetation unit. It is possible that there will not be a precise overlap with the original vegetation unit. This is to be expected if the original vegetation unit mapping is done at 1:50 000 scale.

**FLOW CHART INDICATING RELATIONSHIP BETWEEN LEVELS OF PLANNING DOCUMENTS**

