



# ECOSYSTEM SERVICES

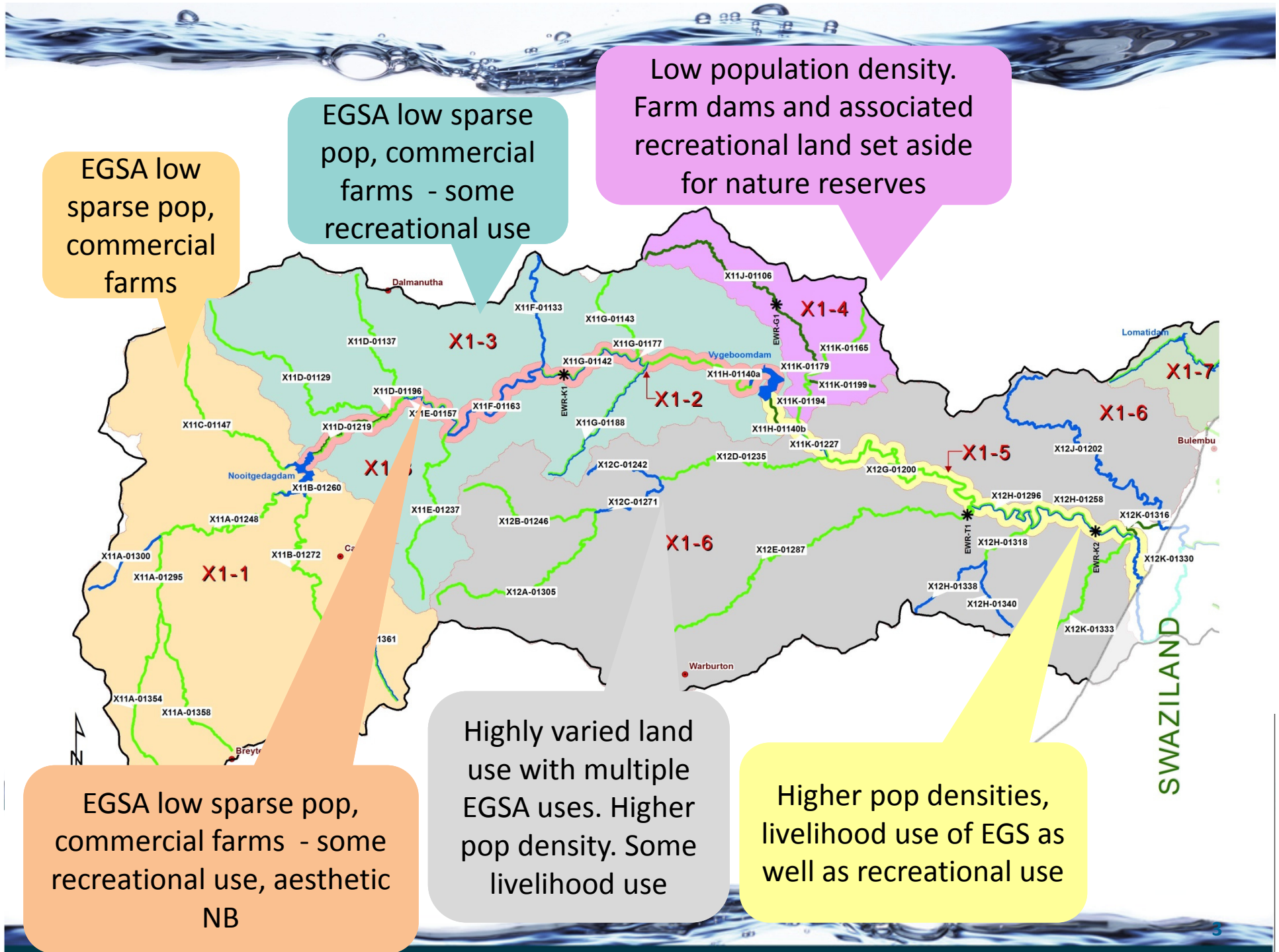




# Ecosystem Services

- The following methods to generate a picture of the most important Services that are associated with the riverine system and may be subject to change under a potential range of operational scenarios.
  - Literature survey and information for the Reserve studies
  - Analysis of maps and Google Earth images



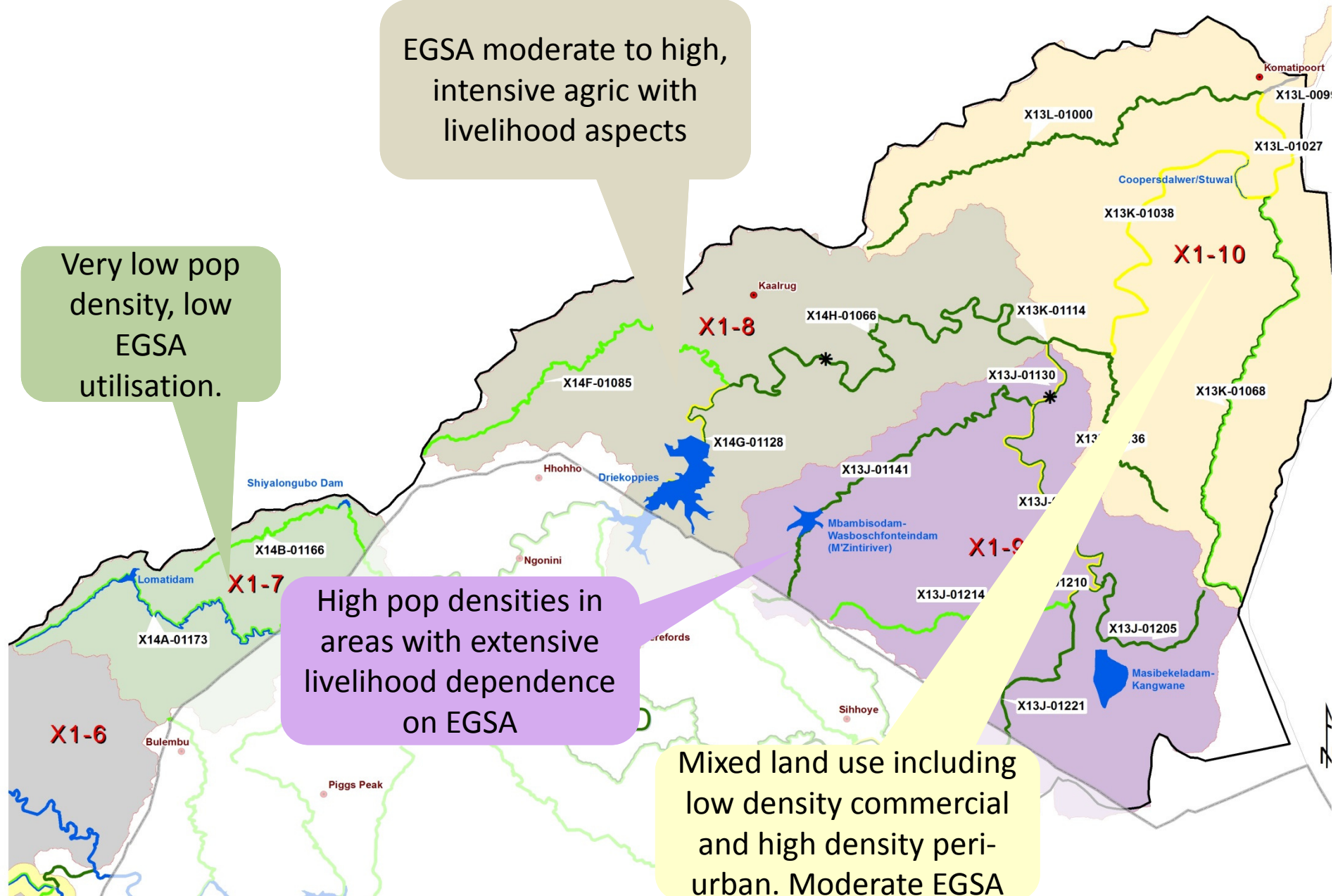


EGSA moderate to high,  
intensive agric with  
livelihood aspects

Very low pop  
density, low  
EGSA  
utilisation.

High pop densities in  
areas with extensive  
livelihood dependence  
on EGSA

Mixed land use including  
low density commercial  
and high density peri-  
urban. Moderate EGSA



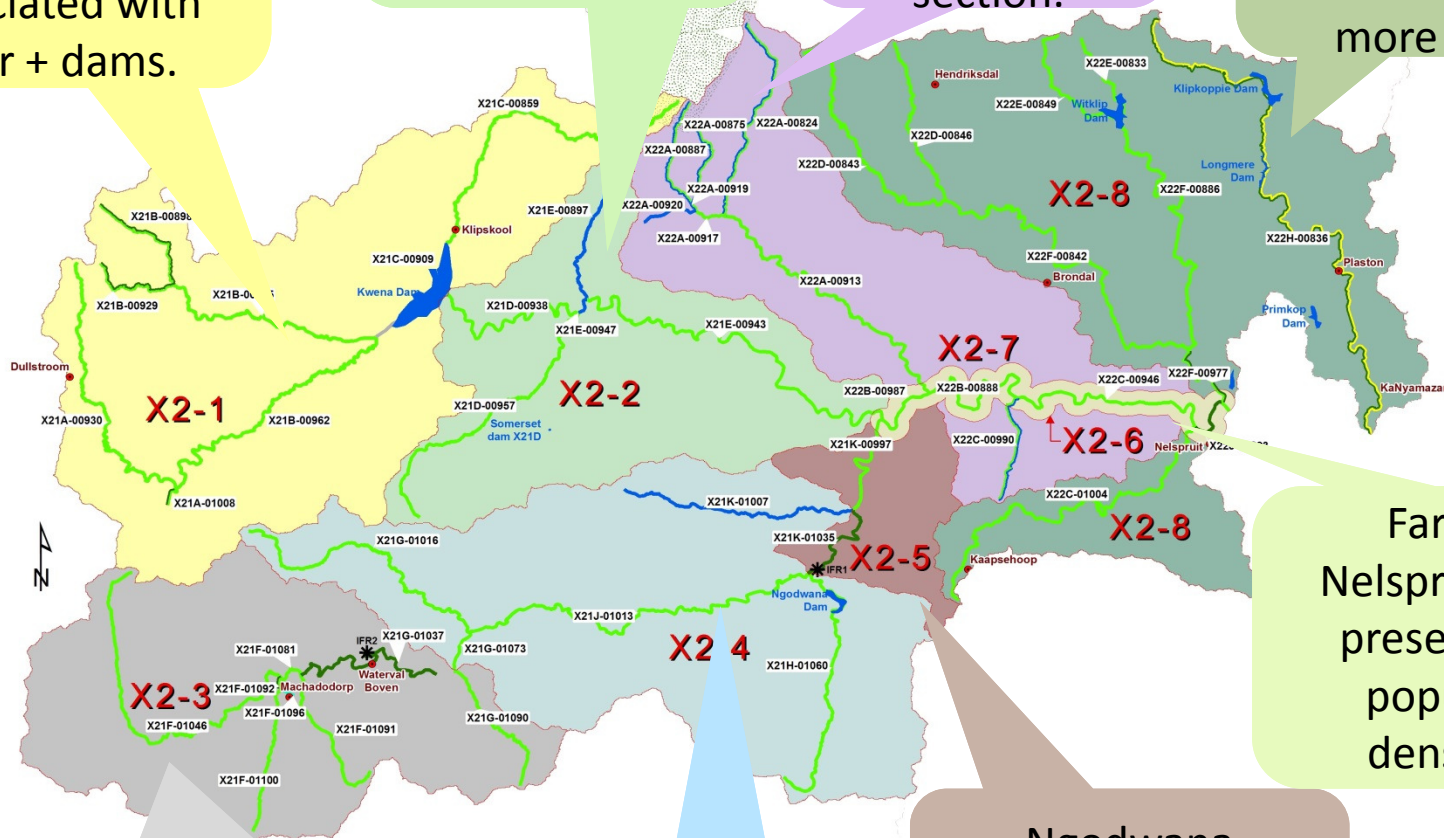


Mixed farming and forestry. Tourism and recreation associated with river + dams.

Low density farming. Some tourism elements noted.

Sparse pop. Tourism and recreational in the lower section.

Upper sparse, lower dense pop, EGSA livelihood more NB



Mixed Farming and forestry. Tourism and recreation associated with river + dams.

Commercial agriculture, SAPPI Mill, EGSA low. Some rec

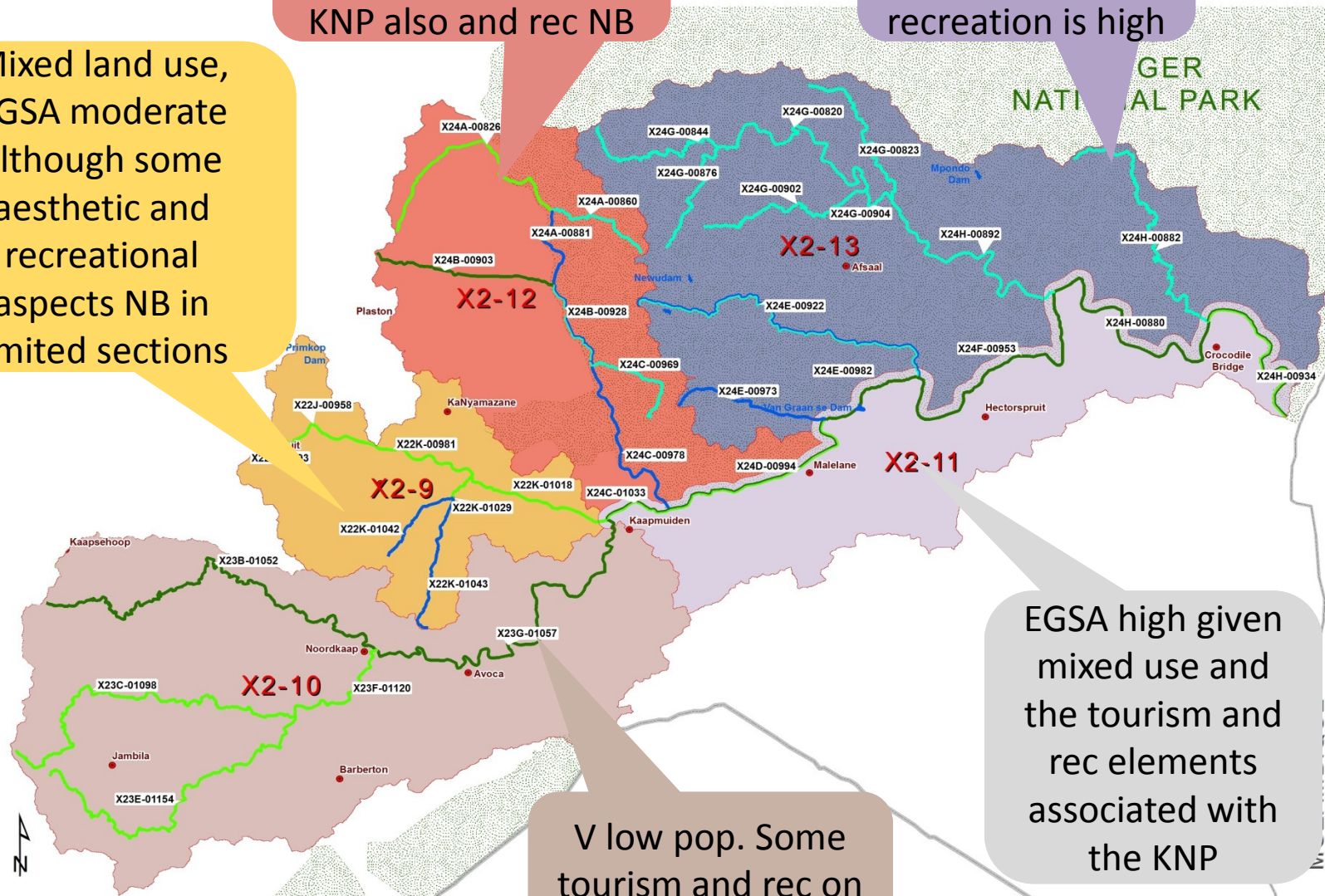
Ngodwana township – very limited EGSA

Farming, Nelspruit. EGSA present given population densities.

High pop density settlements with livelihoods EGSA. KNP also and rec NB

KNP. EGSA associated with tourism and recreation is high

Mixed land use, EGSA moderate although some aesthetic and recreational aspects NB in limited sections



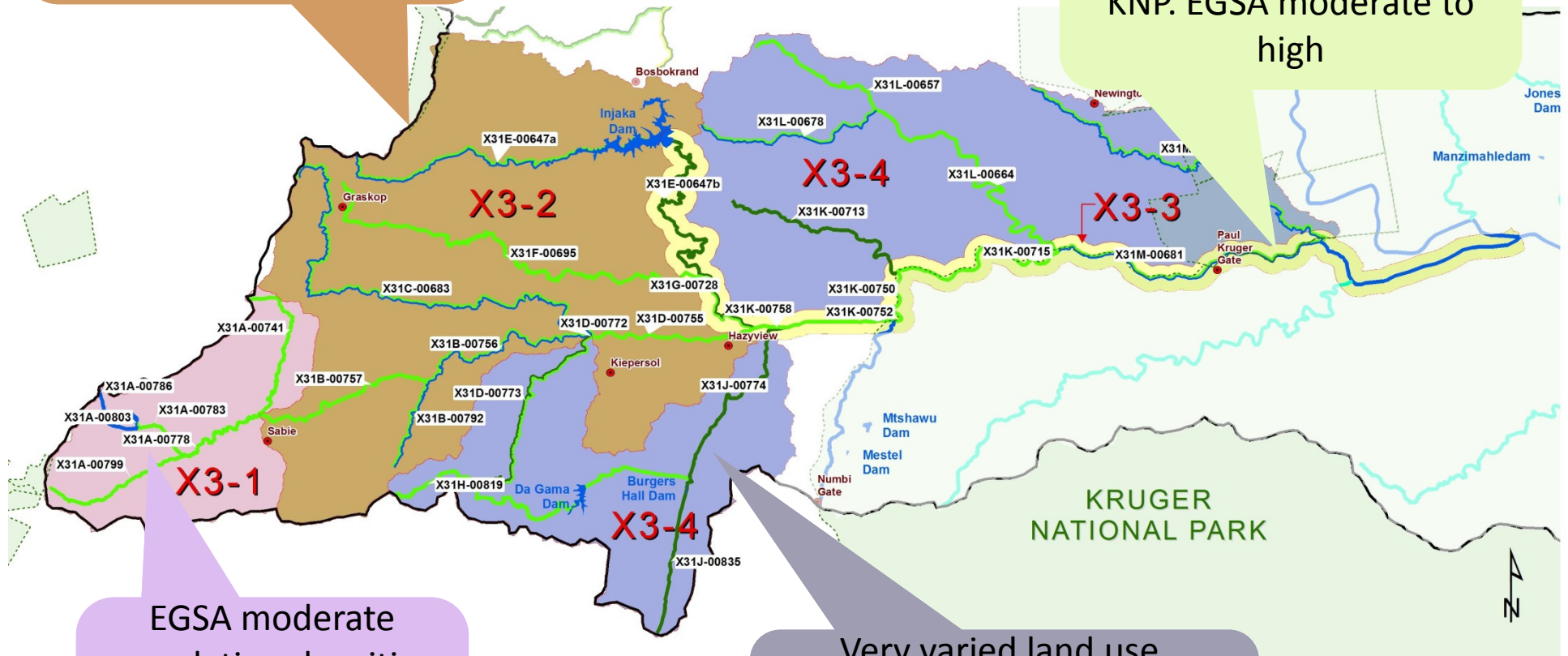
EGSA high given mixed use and the tourism and rec elements associated with the KNP

V low pop. Some tourism and rec on Kaap proper



Farms, Forestry, towns.  
Mixed use EGSA  
moderate. To high.,  
Some NB rec and  
aesthetic

Many land types and  
uses – Farms, towns and  
KNP. EGSA moderate to  
high



EGSA moderate  
population densities  
low but aesthetic  
and rec aspects  
elevating score.

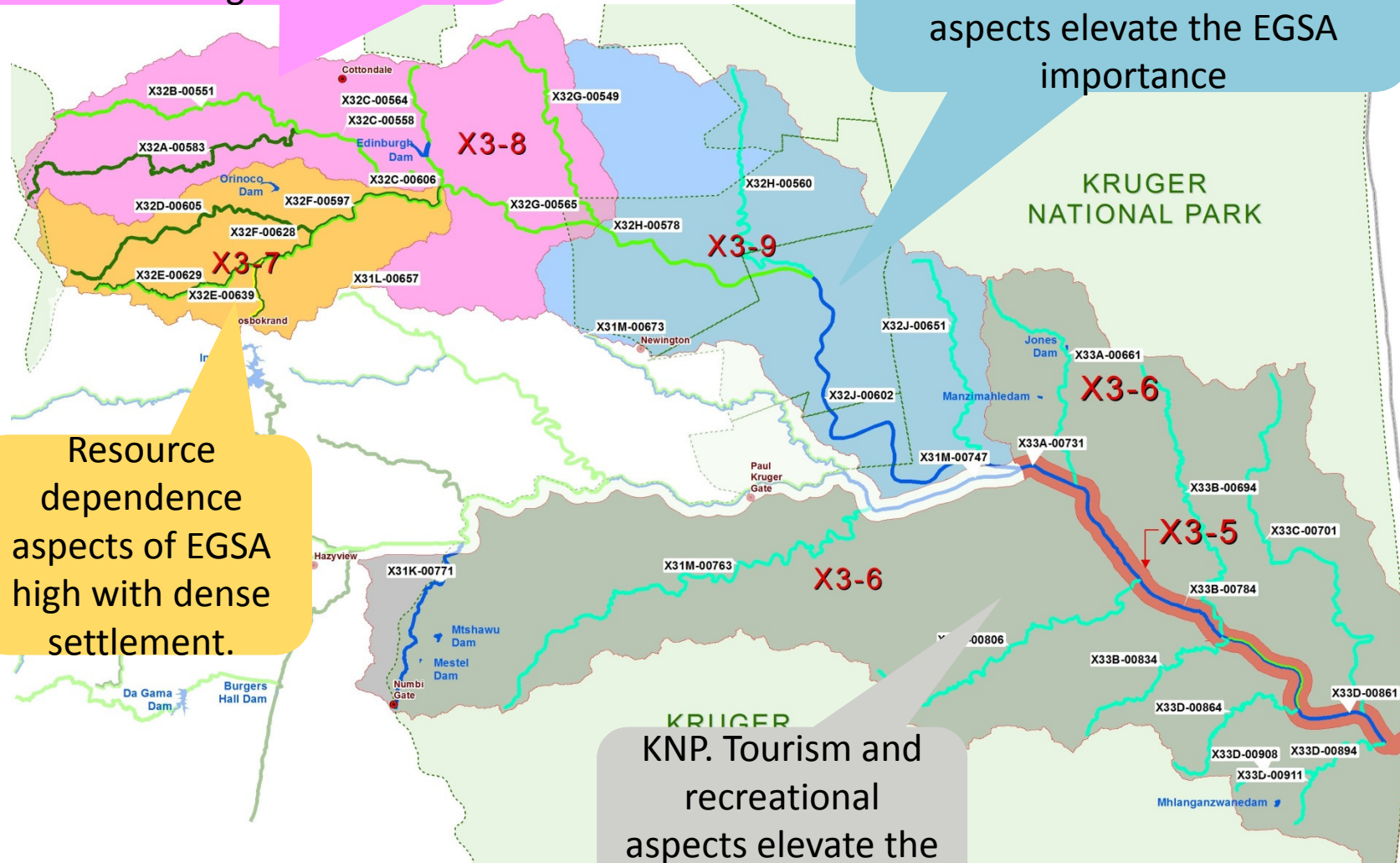
Very varied land use.  
Farming, forestry, high  
density settlement, EGSA  
moderate to high

Very varied land use. Farming, forestry, high density settlement, game park, EGSA high

Virtually all Game Park but also includes settlements. Tourism and recreational aspects elevate the EGSA importance

Resource dependence aspects of EGSA high with dense settlement.

KRUGER NNP. Tourism and recreational aspects elevate the EGSA.







# Summary and conclusions

- **Two types of analyses will be/have been carried out:**
  - ‘Traditional economics’ to value the water
  - An EcoSystem Services analysis to describe the services provided by the river cannot easily be expressed in monetary terms.
  - The focus is on important EcoSystem Services that will change under operational (flow) scenarios

