

# Natural & Environmental Values Owen Stanley Ranges & Kokoda Track Region

**James Sabi**

Manager, Terrestrial Ecosystems  
PNG Department of Environment and Conservation

Telephone: (+675) 301 4500

Facsimile: (+675) 325 0182

Email: [jsabi@dec.gov.pg](mailto:jsabi@dec.gov.pg)

# Natural Values



# JU2 Goals

- Goal 1 A **safe and well-managed Kokoda Track**, which honours its wartime historical significance and protects and promotes its special values
- Goal 2 **Enhanced quality of life for landowners and community** through improved delivery of basic services, income generation and community development
- Goal 3 **Wise use and conservation of the catchment protection area, including the Kokoda Track and its natural and cultural resources and values**
- Goal 4 Building **national and international tourism potential** of the Owen Stanley Ranges and Kokoda Track Region, **supported by a possible future World Heritage nomination**
- Goal 5 **Working with communities, landowners, industry and all levels of government** to ensure that activities under the Kokoda Initiative are sustained into the future.

# Values of the Region

## Biodiversity Priority Areas

- In 1992, assessment of PNG's important biodiversity areas
- Owen Stanley ranges region was identified as very high biodiversity priority area.
- 

## PNG Government Decisions

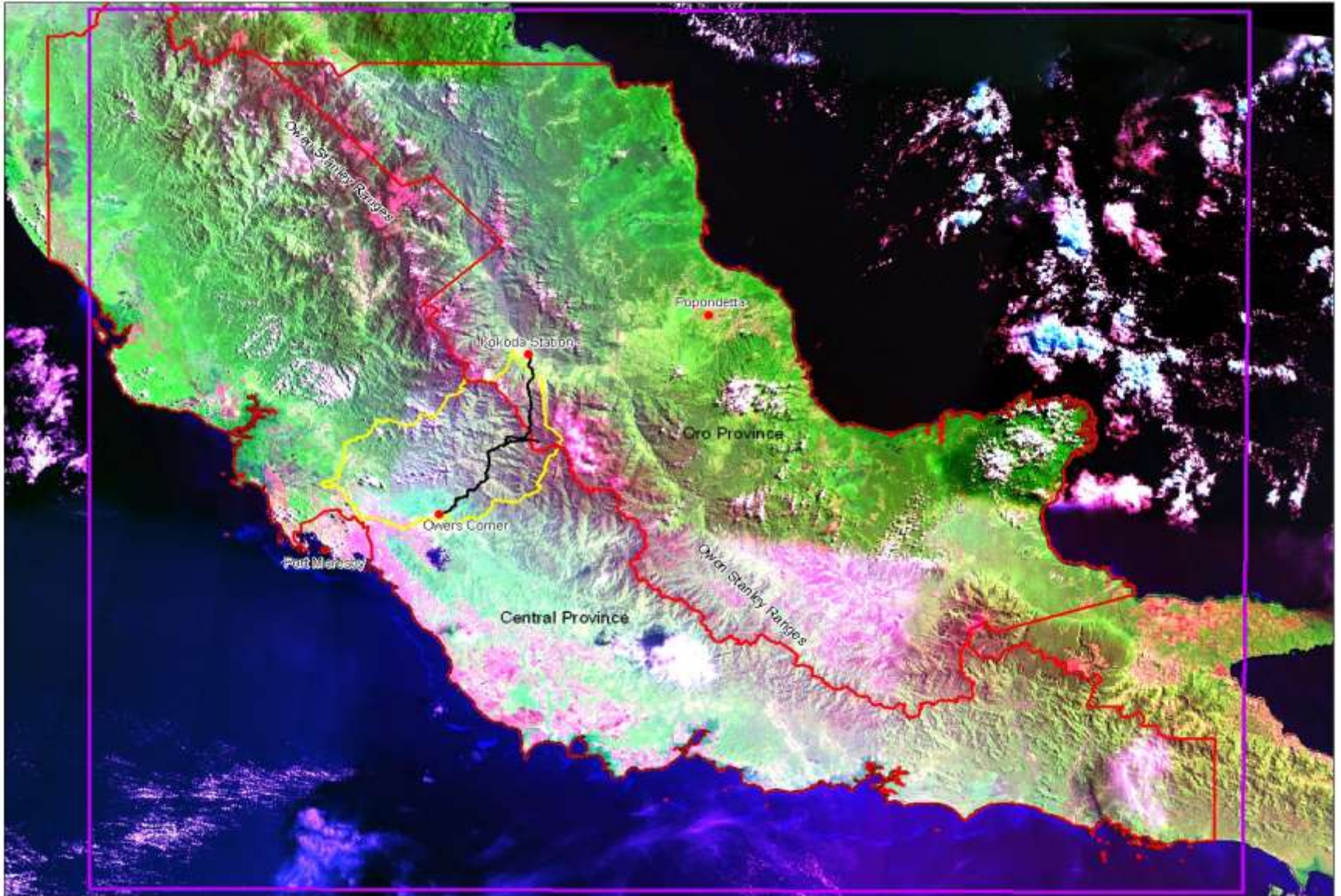
- In 2006, the Kokoda Track and Owen Stanley Ranges & Kokoda Track was placed on World Heritage Tentative List.
- In 2008, the National Executive Council made a decision to protect Brown River Catchment for future power & water for Port Moresby.
- In 2008, PNG and Australia signed a Joint Understanding on Owen Stanley Ranges, Brown River Catchment & Kokoda Track Region Development.
- In 2010, PNG and Australia signed a Second Joint Understanding on Owen Stanley Ranges, Brown River Catchment & Kokoda Track Region Development

•  
**Kokoda Initiative**

A joint PNG-Australian government initiative for the sustainable development of the Owen Stanley Ranges, Brown River catchment and Kokoda Track region.

# Location & Area of Interest

Kokoda Initiative Area of Interest & Interim Protection Zone (IPZ)



# Natural heritage (Biodiversity) values - Owen Stanley Range, Brown River & Kokoda Track Region

## Why?

DEC is working towards a Heritage listing to gain international recognition of this special region, and provide the additional level of protection that comes with heritage listing.

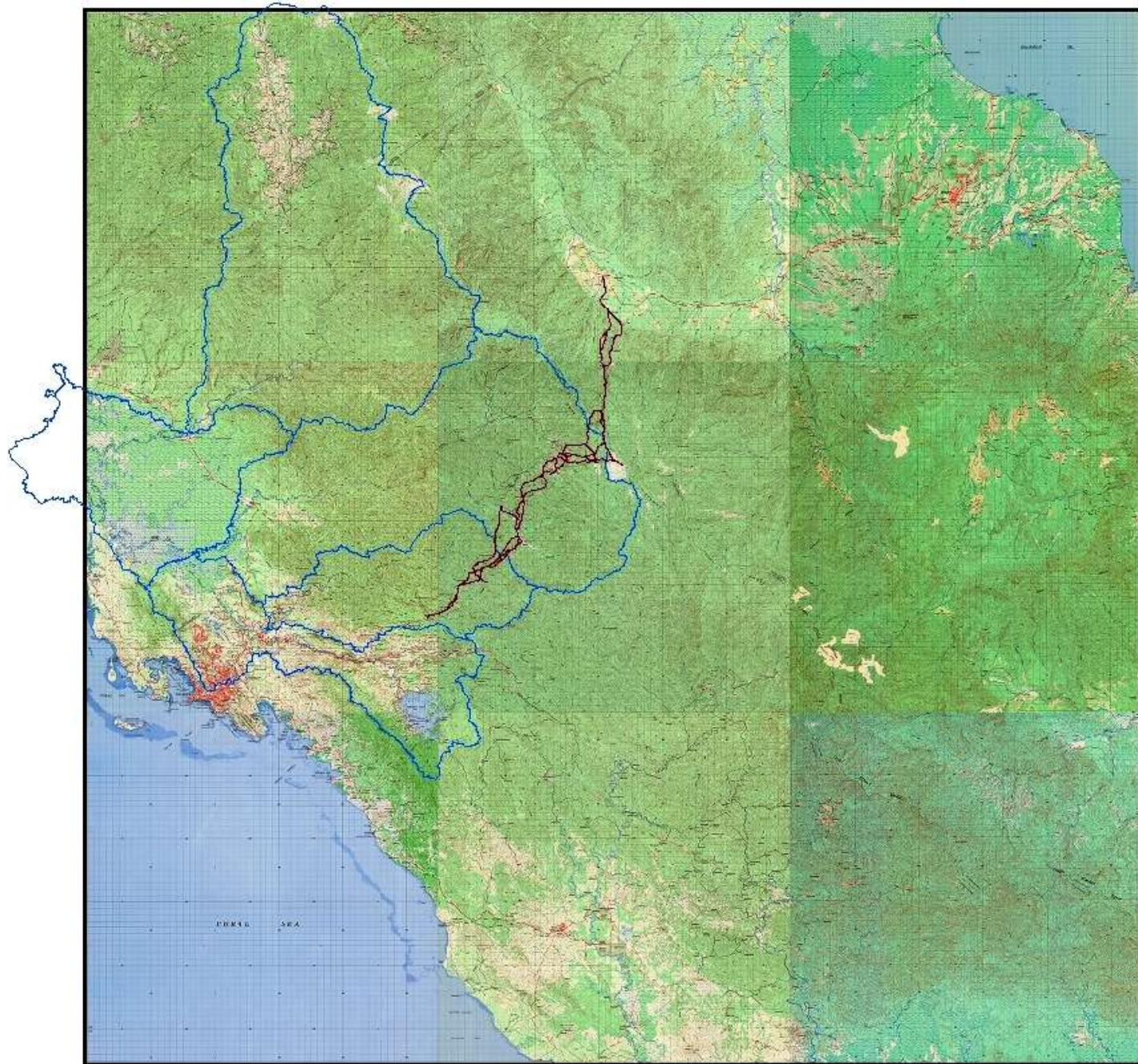
## Area

- Mount Victoria (esp. Subalpine area)
- Naoro River (esp. Riverine corridor and Madilogo volcano)
- Lowland Rainforest and Savanna (esp. Goldie River, Hombrum Bluff incl. Blamey's Garden)
- Vanapa-Brown Wetlands (whole system, esp. freshwater to saltwater transition)
- Mount Kenevi-Myola Lake (esp. Myola Lake, Mount Kenevi summit, Lost Battlefield)
- 'Mountains to Mangroves' (esp. Mount Victoria - Brown River - Lowland Rainforest)
- Savanna to Vanapa Wetlands transect (preferably extended to Mount Albert Edward)

## Findings

- High in natural and cultural values, including important geological heritage
- High biological diversity rating, Important for rare, endangered plants and animals

# Values Study Areas



**Kokoda Initiative**

A joint PNG-Australian government initiative for the sustainable development of the Owen Stanley Ranges, Brown River catchment and Kokoda Track region.

# Preliminary Results

## Natural Values: 'High Country' (Subalpine and montane)

- The higher altitude parts of the Owen Stanley Ranges are of particular natural heritage interest.
- There are extensive areas of treeless landscape above about 2,500 metres which forms a distinctive habitat.
- All of the high country is not permanently occupied by human populations and is not regularly hunted
  - ✓ *a combination that is of special interest from a wildlife conservation perspective.*

## Biodiversity

- No attempt made to comprehensively document all species records from the high country of the Owen Stanley Ranges
  - *The region is one of the most poorly surveyed for biodiversity in the whole of PNG.*
  - *E.g. Mt Victoria to Mt Kenevi section of the Owen Stanley Ranges escaped the attention of the Archbold expeditions in the 1930's and 1940's.*

## Next steps

- Detail Biodiversity Studies to be conducted from 2013



**Goodfellow's Tree  
Kangaroo (*Dendrolagus  
goodfellowi*)**



New Guinea Singing  
Dog  
(*Canis hallstomi*)  
Troughton 1957



- A scientific specimen was collected from Mount Scratchley in 1897
  - ✓ *The habitat of the New Guinea Singing Dog is generally regarded as being limited to the higher elevations of the central mountain range of PNG, which includes the Owen Stanley Ranges.*
- Several documented early exploration journals make mention of 'wild dogs' on the high country of the Mt Victoria

# Preliminary Results

## Natural Values: *'Naoro River'*

- The Naoro River was given special attention because of its special landscape characteristics, in particular the presence of the riverine wetlands ecosystem.
- The valley floor is characterised by a well developed floodplain more typical of lowland rivers than rivers in the mountains.
- The waterfall has maintained isolation of the aquatic fauna, fish in particular, from the Brown River aquatic ecosystem, opening up the prospects of local endemic species having evolved in situ.

## Threats to Biodiversity

- ***Aquaculture:*** Farming of introduced species of plants and animals such introduced fish (e.g. tilapia) could represent a serious environmental threat.
- Fish in particular are seen as a potentially disastrous possibility given that the isolated fish fauna upstream of the Madilogo Waterfall has not yet been studied..

## Next steps

- Detail Biodiversity Studies to be conducted from 2013

Madilogo Falls on the Naoro River. Madilogo Falls is a feature important to the culture of the Mountain Koiari. Photo: Nelson Badi



# Preliminary Results

## Natural Values: *'Vanapa Brown Wetlands*

- The Vanapa-Brown is by far the largest and most important coastal wetland in Central Province
- Also a wetland of international significance (for migratory birds).

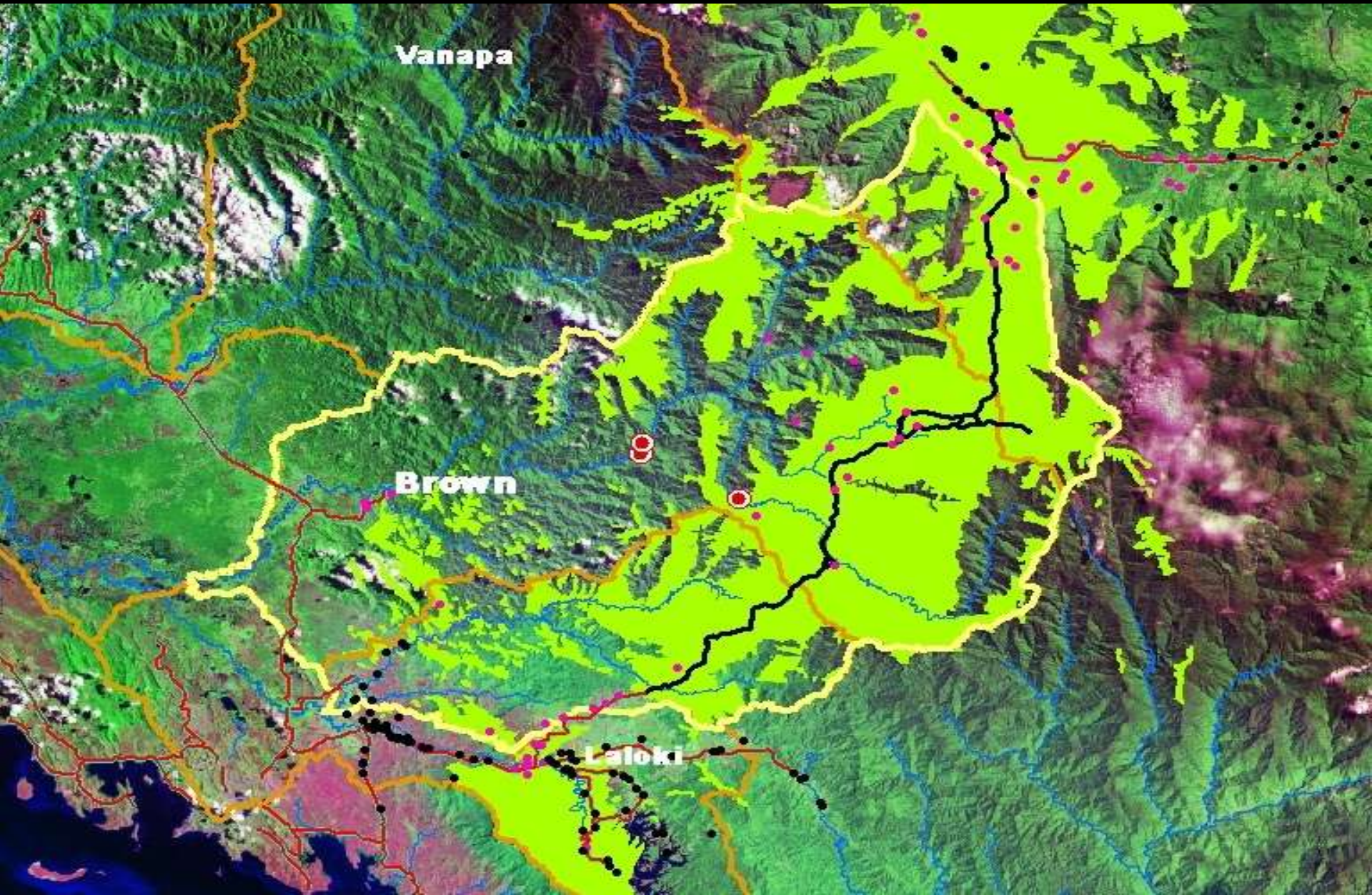
## Biodiversity

- ***Plants and vegetation:***
  - No published detailed vegetation map of the entirety of Vanapa Brown wetlands has been located.
  - Paijmans (1975) Vegetation of Papua New Guinea mapped the Vanapa Brown Wetlands as a combination of mangroves, swamp grass, scrub and 'pioneer vegetation'.
- The Vanapa Brown wetlands are well known as habitat of both species of crocodile, the saltwater crocodile (*Crocodylus porosus*) and the New Guinea endemic freshwater crocodile (*Crocodylus novaeguineae*)

# Other Environmental Values

- Hydro power & water supplies
- Forest Carbon Opportunities
- Trekking & tourism (outside KT)

# Hydro Power & Trekking values – Visual amenity



# Challenges

- Building understanding and manage expectations of Stakeholders on the natural & environmental values of the region
- Developing written agreements with government agencies on the protection of the Owen Stanley Ranges, Brown River Catchment & Kokoda Track region
- Creating a stronger whole of government approach in land use planning
- Funding for Biodiversity Surveys & Land use planning (esp. land cover classification)





**Thank you**

**Kokoda Initiative**

A joint PNG-Australian government initiative for the sustainable development of the Owen Stanley Ranges, Brown River catchment and Kokoda Track region.