

# Spotlight on Asset Management

*Current regime, framework and implementation – Case Study*



Far North Queensland Regional Organisation Of Councils

**Darlene Irvine, Executive Officer**



## **Long Term Strategic planning Framework:**

- ❖ **Reflects the future of a local government area**
- ❖ **Represents a community's views, visions and values**
- ❖ **Council's response through corporate plan, long term financial plan, long term asset management plan and strategic land use planning.**



# Included in a strategic framework:

- Settlement pattern
- Access & mobility
- Infrastructure & Services
- Natural environment
- Natural resources and landscapes
- Community Identity
- Strong Communities
- Economic Development
- Governance



## **Sustainability is a strategy**

“A local government is financially sustainable if the local government is able to maintain its financial capital and infrastructure capital over the long term”

### **A Council is sustainable if:**

- It has long term asset Management plans
- It has linked these plans to its long term financial forecasts
- It can manage the financial implications in the long term



**Over a forecast period of 10 years, the following are the key ratios:**

- **Asset Sustainability Ratio**
- **Asset Consumption Ratio**
- **Asset Renewal Funding Ratio\*\***
- **Interest Coverage Ratio**
- **Working Capital Ratio**
- **Operating Surplus Ratio**
- **Net Financial Liability Ratio**

“Financial management (sustainability) guideline 2011” provides additional detail



# Far North Queensland Regional Organisation Of Councils

Financial Sustainability	Legend Assessment:									
						Good		Reasonable		Issue
Ratio	10 Year Forecast Assessment									
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Asset Sustainability										
Asset consumption										
Asset Renewal Funding**										
Interest coverage										
Working capital										
Operating Surplus										
Net Financial liabilities										

The emphasis is on the strategy being employed by the council, with the indicators used to identify any future emerging issues.



Within the Asset Management Framework, the integration of the financial management planning processes include:

- Services, Service Levels, Costs and Risks
- Separate consideration of renewals v upgrades v new assets related expenditures
- The integration of those asset forecasts into the long term financial forecast
- The review or revision of the rating methodologies and revenue policy
- Consideration of the use of loan borrowings to fund infrastructure investments





The development of options

An understanding of services, service levels, costs and risks

Priority setting and review that encompasses the community plan and corporate plan and other key plans





## Far North Queensland Regional Organisation Of Councils



- **223,000 sq km**
  - **Population of approx 260,000**
- Cairns Regional Council**
- Cassowary Coast Regional Council**
- Tablelands Regional Council**
- Cook Shire Council**
- Hinchinbrook Shire Council**
- Etheridge Shire Council**
- Croydon Shire Council**
- Wujal Wujal Aboriginal Shire Council**
- Yarrabah Aboriginal Shire Council**



2010

Far North Queensland Regional Organisation of Councils

# Regional Asset Management Strategy

*(Infrastructure Asset Management and Service Delivery)*



1. What is the current state of assets?

s?

2. What is the current state of assets, and what are the risks?

assets,

3. What position will we be in 10, 15 and 20 years?

, in 10,



## Three significant questions

Ascertaining the lifecycle of assets and  
determining our risk portfolio across  
these assets for the next  
5, 10, 20 years



# Some of the challenges facing LG in Qld include:

- Increasing community expectation for expansion of services and service levels
- Changing population profiles, with population growth management issues in many areas and decline in others
- Costs increasing at a greater rate than the CPI
- The replacement of ageing infrastructure
- The 'tree' and 'sea change' phenomena facing coastal and hinterland
- Provision of new services (aged care etc) not previously provided, and
- Compliance with increasing legislative, legal and governance requirements

1. Linking policies and strategies with a Long Term Program
2. Develop Infrastructure Service Delivery Plans and Long Term Financial Plans
3. Develop Long Term Asset Management Plans Including Risk Management Plans



## Key Findings

# 1. Population trends and environmental performance

- ? How should we plan and fund asset renewal?
- ? Are there environmental, social and cultural limitations?
- ? Should rural communities operate as self-sustaining economic business units?
- ❖ Many assets built in growth booms will need renewal within the next 20 years
- ? What role do rural communities play in the social and cultural well being of a country?
- ? How can we identify national or regional benefits?
- ? Central governments support 'growth', should they also support 'decline'?



2. Transport Trends
3. Cost Shifting and Funding
4. Responsibility of Custodianship
5. Increasing Community Expectation
6. Skills Shortages
7. Changing Regulation
8. National Trends



# Strategy Complete – What now?

What services do we currently deliver to the community through our infrastructure?

At what cost?



# Community Plans & Levels of Service

- Council LT community plans
- Levels of Service vital to community consultation
- Affordability & consistency
- What do you want?
- What can Council afford?
- How much are you prepared to pay for what you want?
- SORRY or NO PROBLEM!



**Service**

## Levels of Service Frameworks

- **Commenced with Parks & Sporting Facilities – Easy??!!  
not so #%&! easy!!**
- **Completed Buildings and Roads**
- **Regular workshops - all local governments represented**
- **Strong leadership at political level**
- **Collaboration at staff level**
- **Absence of completed existing frameworks**

# Levels of Service Frameworks

- Adopted NZ NAMS reference *“Developing Levels of Service and Performance Measures”* as guide
- Quite detailed and complex but very thorough
- Levels of service need to be measurable in some form
- FNQROC framework → simple but useful



# Levels of Service Framework for FNQROC

- Customer Value
- Customer Level of Service
- Technical Level of Service / Performance Measure





# Customer Value - Accessibility

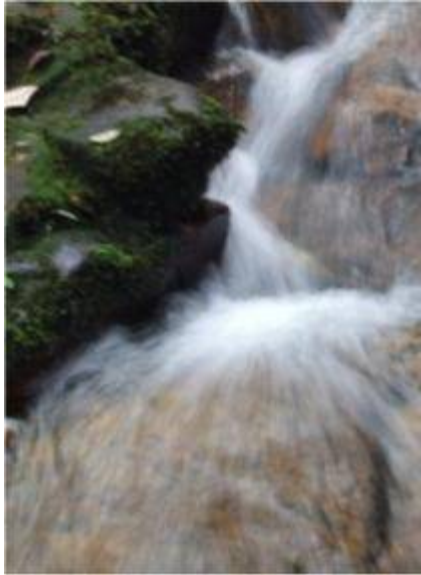
Customer Level of Service Standard	Technical Level of Service / Performance Indicator
Adequate & usable park space provided	Hectares of park provided per 1000 head of population
	Size of park - minimum, median, maximum (hectares)
	Slope of park (fall - 1 in x)
	Flood immunity of park (% above say ARI 50 level)
	No. of complaints received about overcrowding (per annum)
Parks are located within walking distance of homes	% of parks with safe walking access and / or path links
	% of urban residents live within 1000m of a park
Parks have adequate on / off street parking	No. of complaints received from residents near parks about parking congestion (per annum)
	No. of complaints received from park users about parking (per annum)
Parks are easily accessible by public transport	% of parks have bus stop located with 300m
Parks are wheelchair accessible	% of parks are wheelchair accessible
	% of parks that cater for disabled parking
	No. of complaints received about disabled access to parks (per annum)
Parks are available for public / private functions	% requests for use are condition approved

## What next?

- LGs currently trialing Parks LoS framework
- Determining current LoS and costing
- Over-Servicing / Under-Servicing / Just Right?
- Minimum and Desired LoS in future



# Introducing natural assets



*“An area of natural vegetation or land that is not used for the defined purpose of a sporting facility or park?”*

# Local Government Natural Assets – Where are they?



Low integrity



High integrity

# Open Spaces (Natural areas)

Parcel types that are covered in this category might include;

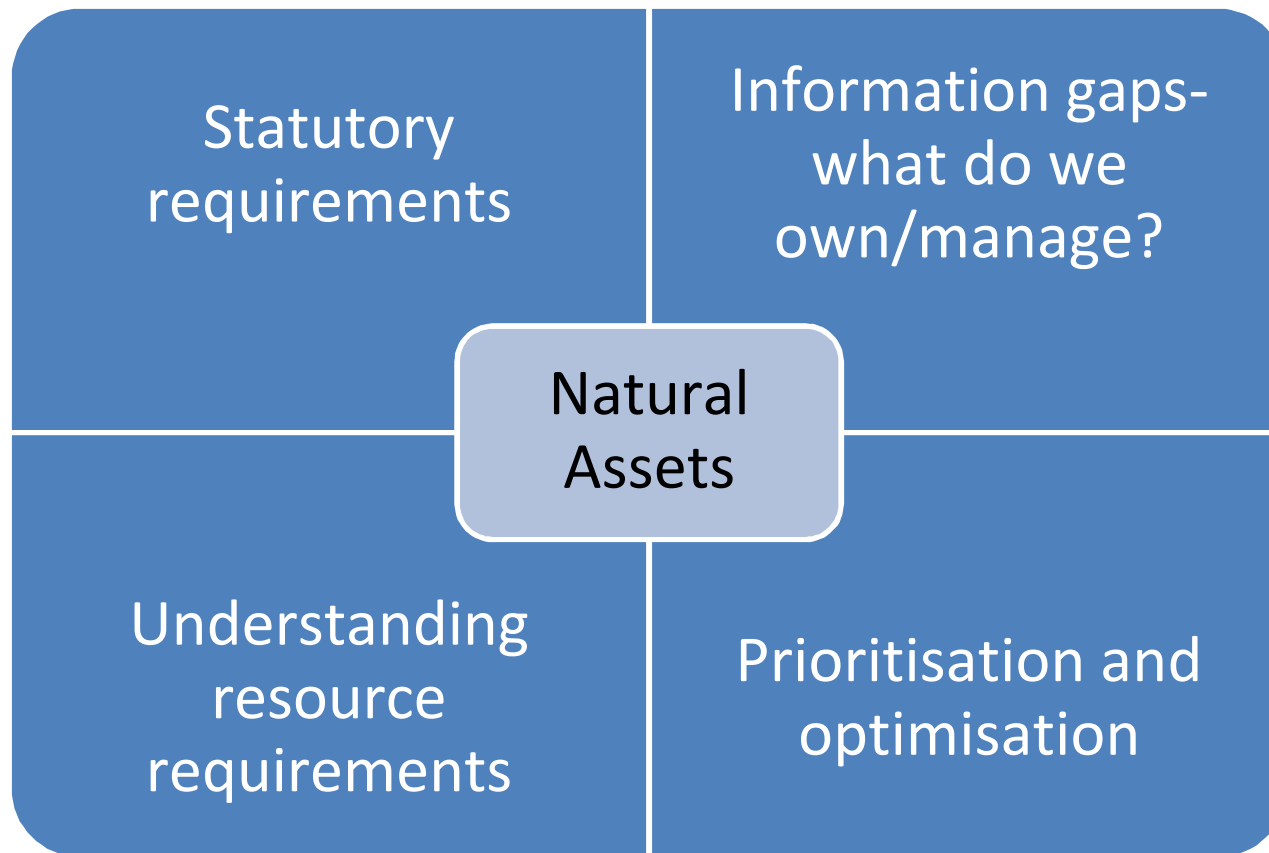
- RESERVES FOR CONSERVATION
- COASTAL AND FORESHORE RESERVES AND ESPLANADES
- DRAINAGE RESERVES AND ESPLANADES



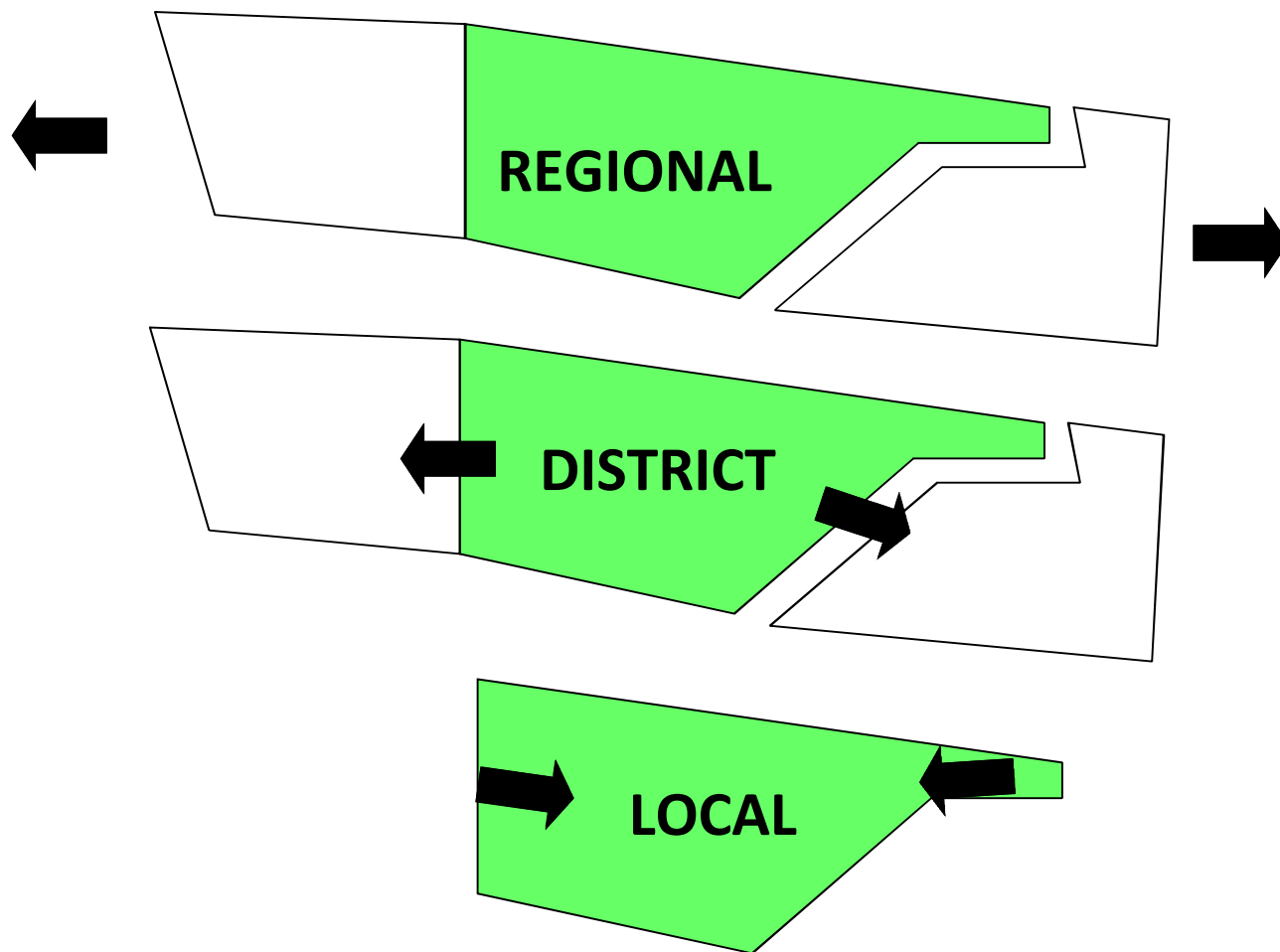
Other parcel types that contain natural areas;

- RESERVES FOR DUMPING
- QUARRY RESERVES
- ROAD RESERVES AND EASEMENTS
- LAND WITH OTHER UNALLOCATED USE
- RESERVE FOR CAMPING RECREATION & PARK
- RESERVE FOR LOCAL GOVT (BOAT HARBOUR)
- RESERVE FOR SCENIC & RECREATION PURPOSES
- RESERVE FOR PARK
- WATER SUPPLY RESERVE
- RESERVE FOR SCENIC PURPOSES
- RESERVE FOR CAMPING & GRAVEL PURPOSES
- STOCK RESERVES
- RIVER IMPROVEMENT TRUST SITES (PENDING)

# Origins of a natural asset approach



# Describing the Natural Asset- asset classes



# Natural Assets – Technical levels of service

	LEGILSATED PESTS	RUBBISH DUMPING	PEST MAPPING	FIRE (FRB)	PASSIVE REHABILITAION	UNAUTHORISED ACCESS	ENVIRONMENTAL PESTS	FAUNAL ASSETS	MANAGEMENT PLAN	COMMUNITY ENGAGEMENT	MONOTORING PROGRAM	ECOLOGICAL FIRE	REVEGETATION
Regional													
District													
Local													

## *A few truths about us (the region) and natural assets*

- *Good to great knowledge of a small number of our natural assets (low hanging fruit)*
- *Little to no information on most (distribution, scale, condition)*
- *Creatures of habit (same places doing the same thing)*
- *Little to no understanding and forward planning in the economics of management (cost:benefit)*
- *Difficulty in articulating the needs of natural world beyond the emotive (do the right thing)*
- *Locked into responding to cyclical and opportunistic investment (because we are yet to emphatically demonstrate otherwise)*

# Natural Asset Methodology



- Combines all relevant spatial data into parcel description
- Data validation

- Expert validation
- Additional information
- Classification

- Management/ O & M requirements
- Additional information



***Basic framework-3 stages***

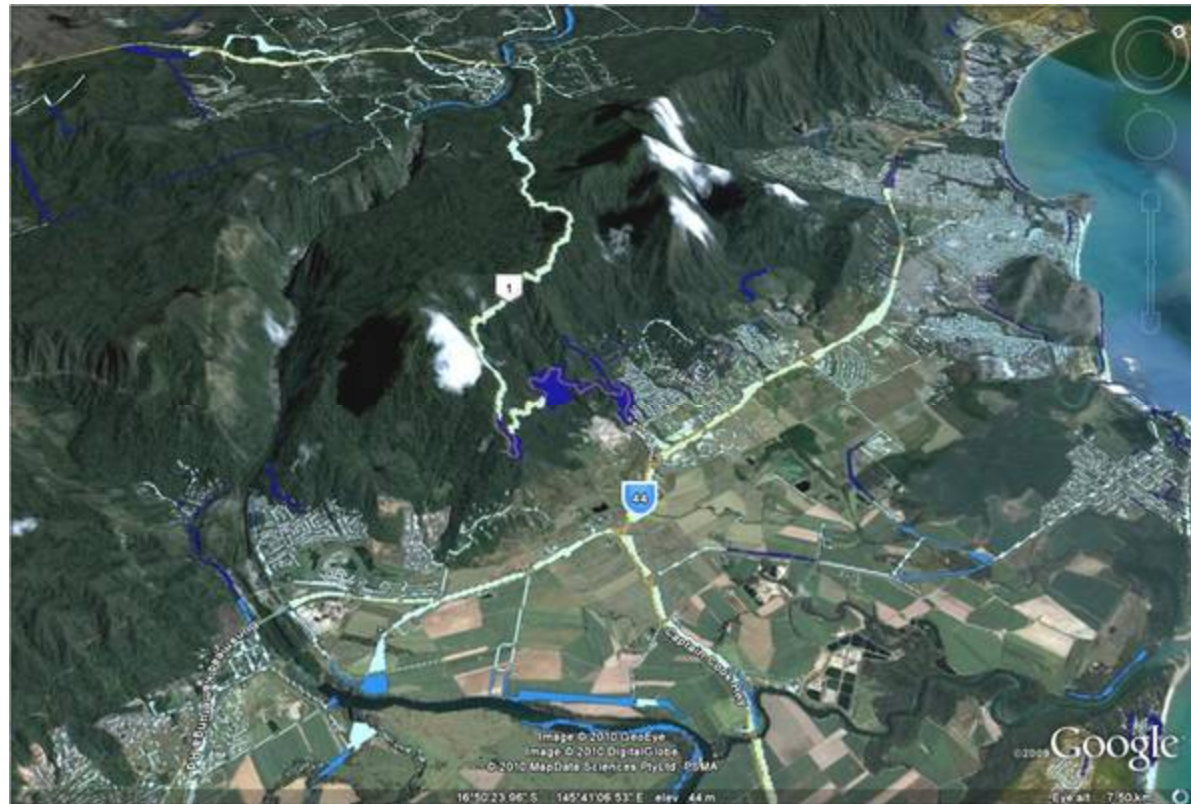


# *Data sets*

# End product

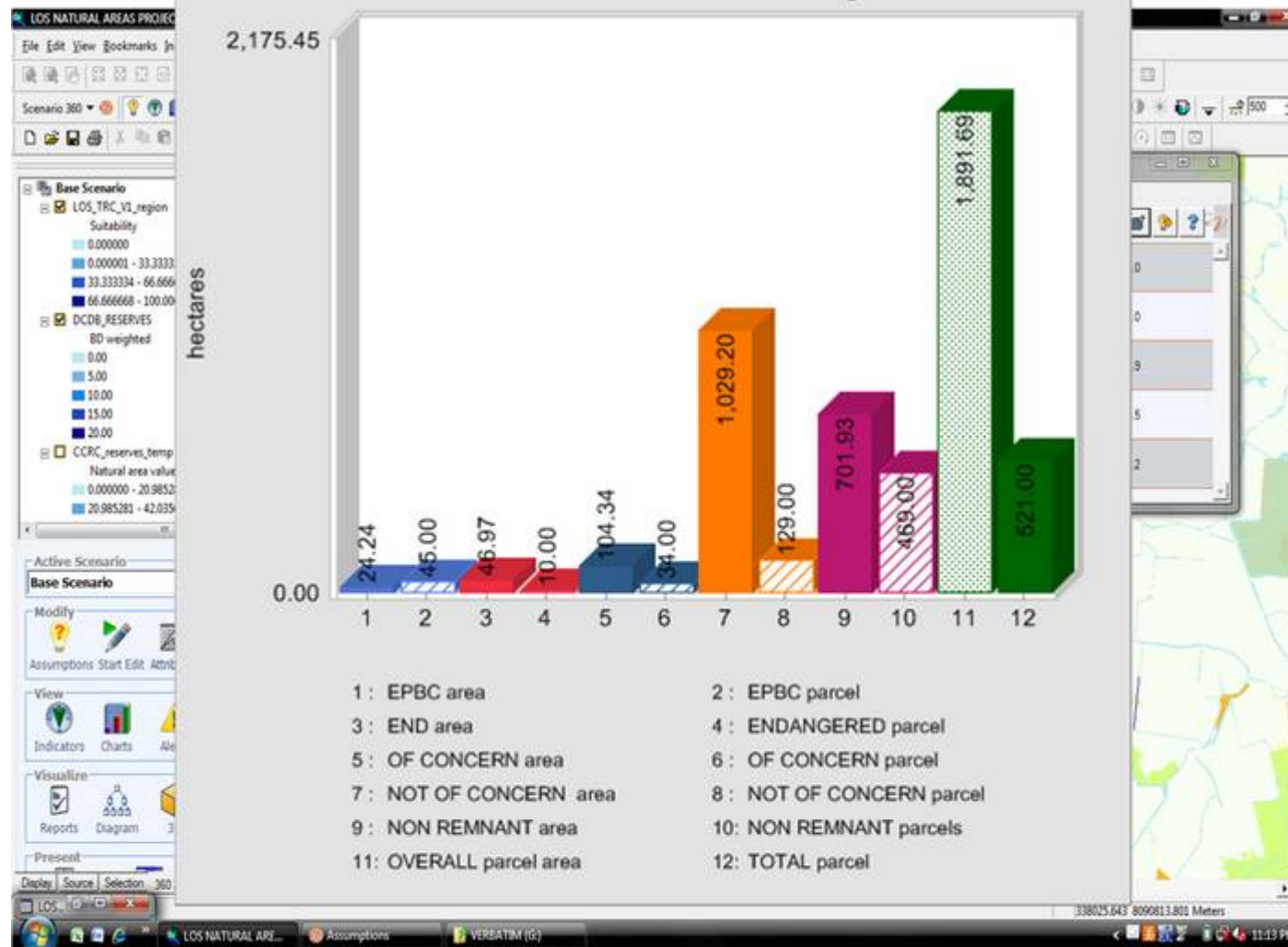
## *Regional natural areas/assets data set*

(TAB, .shp, .xls, .kmz, .dbf ...etc)

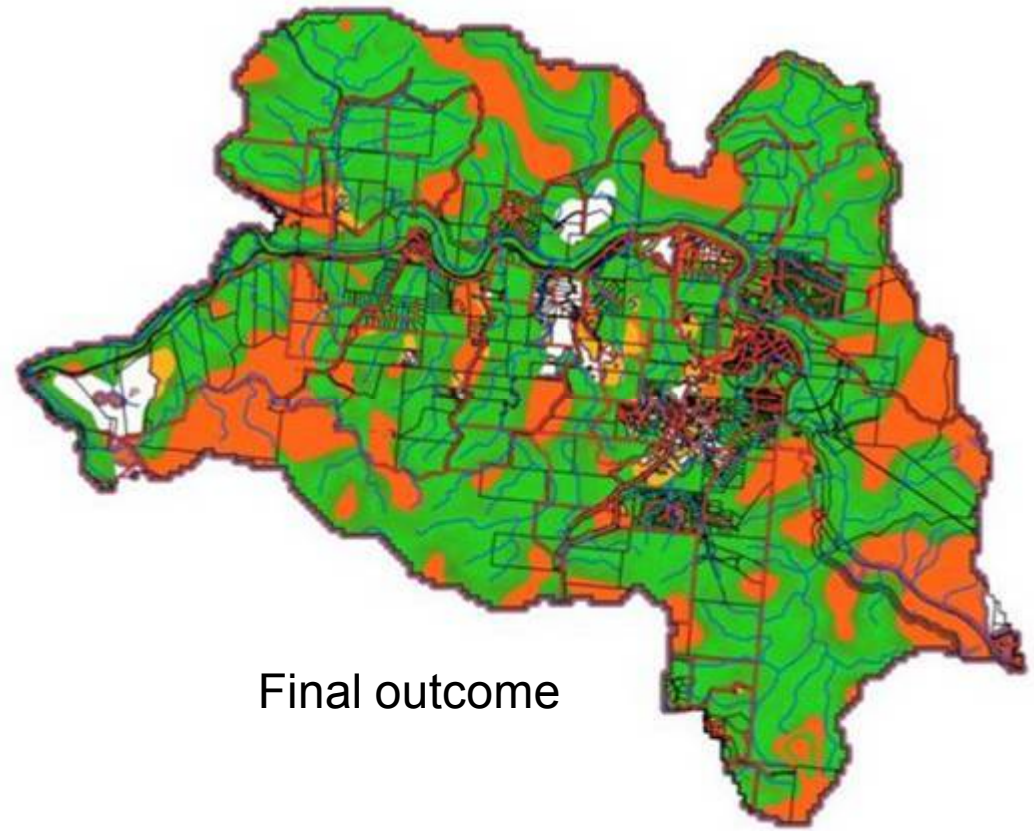
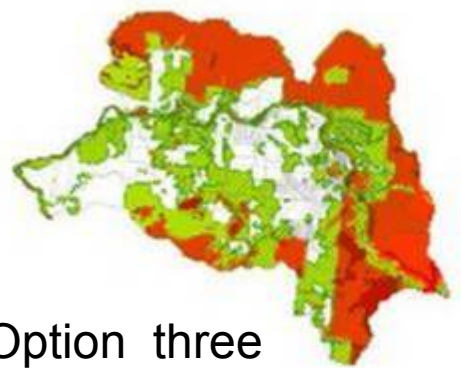
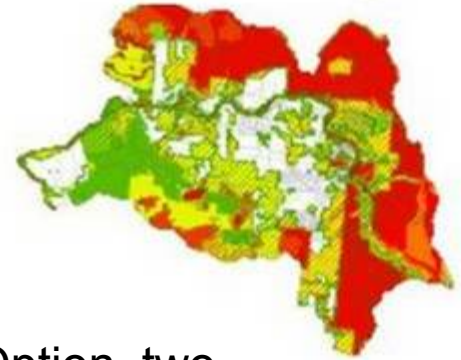
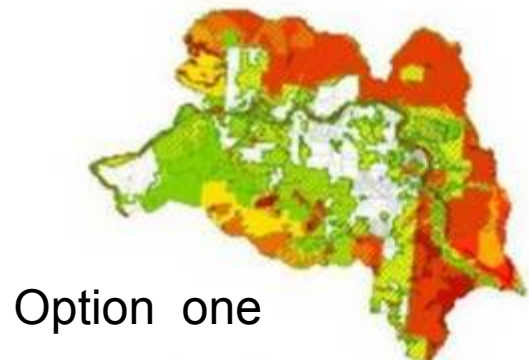


# Products

# End products TRC summary



# Products

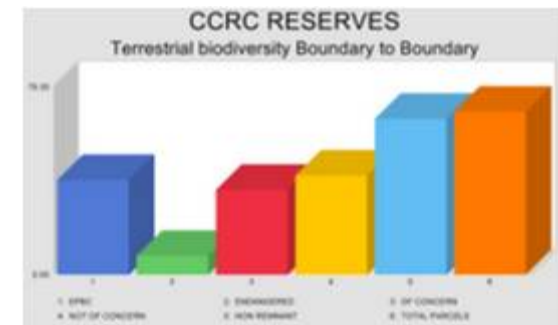
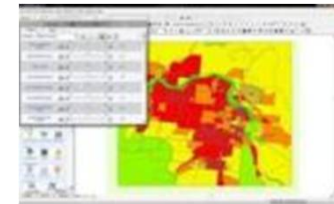
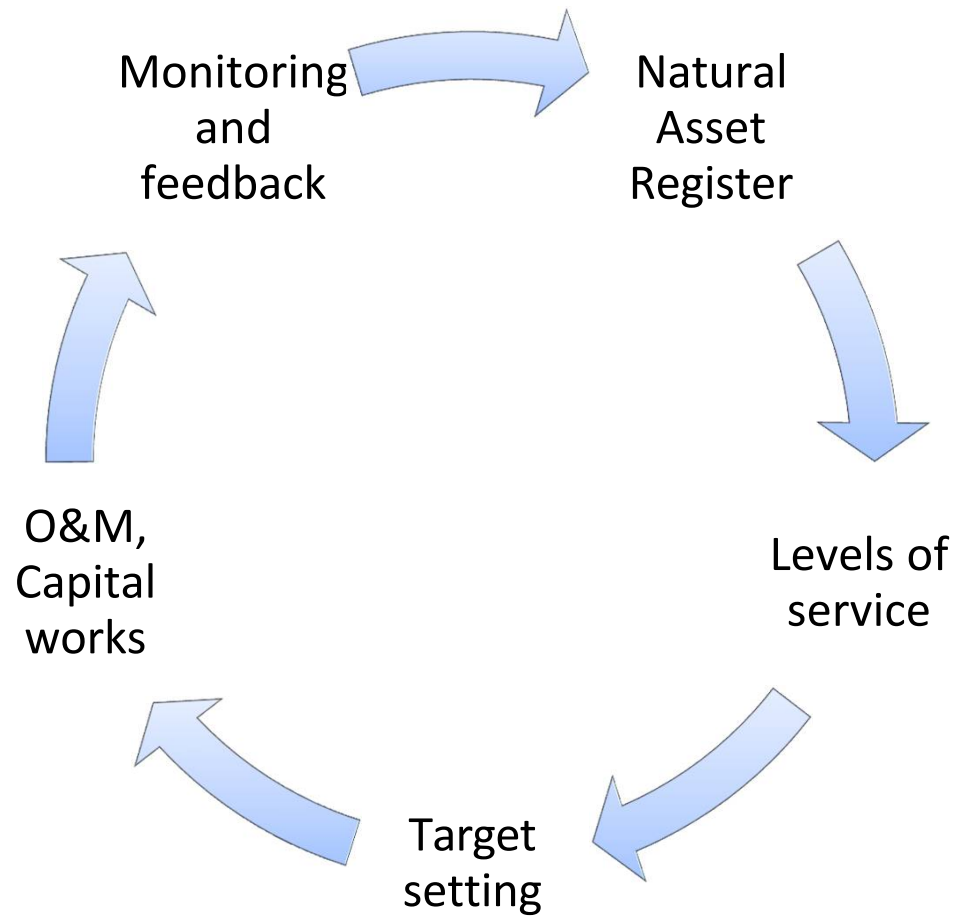


*“Using scenarios in the decision making process”*



# *Adaptation to planning*

# Final product - Asset Management Plan



Natural Asset  
Planning Project

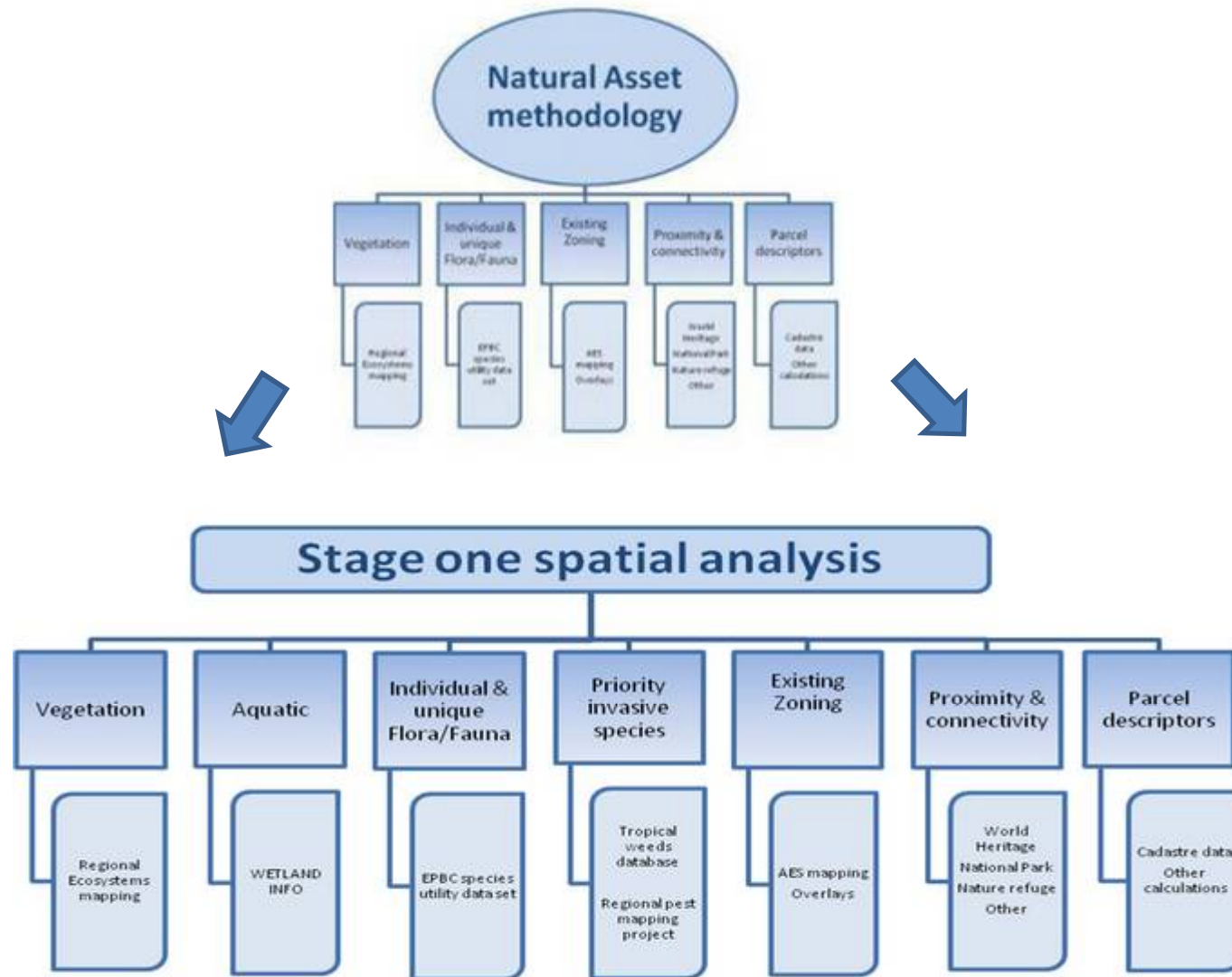


Interactive  
Biodiversity  
Assessment &  
Planning Framework

*“The evolution  
of one concept  
into many”*

## Key attributes (parcel)

- *Area (each bio-diversity attribute, other open space)*
- *% cover (each bio-diversity attribute, other open space)*
- *Proximity zoning (WHA, National Parks, other high reserves)*
- *Proximity other features (beach fronts, drainage, riparian wetlands)*
- *Distance along networks (2031 corridors)*
- *Specific values tabled (regional ecosystems)*
- *Presence/absence of pests & weeds*



*“Expanding the content to include more information relevant to planning decisions”*



***Adaptation to planning***

# Biodiversity

## *Flora*

3,000+ plant species

210 families

17% of Australia's vascular plants

(Wet Tropics Management Authority)

## *Fauna*

Cassowary, Mahogany  
Gliders, Tree Kangaroo,  
Crocodiles etc.



# Invasives....

## 28+ species of feral vertebrates

- pigs
  - dogs
  - cats
  - cane toads
  - deer
  - exotic fish
- (Congdon & Harrison 2002)

## 540+ naturalised exotic plant species

- 85+ considered to be high priority for management
- 7 Weeds of National Significance
- 7 Species subject to National cost-shared eradication programs

## All the usual....

- Urbanisation
- Population growth
- Land clearing and degradation
- Climate change



# inputs

## Values

EPBC(National)  
Regional Ecosystems  
(State)  
Wetland data (State)

## Threats

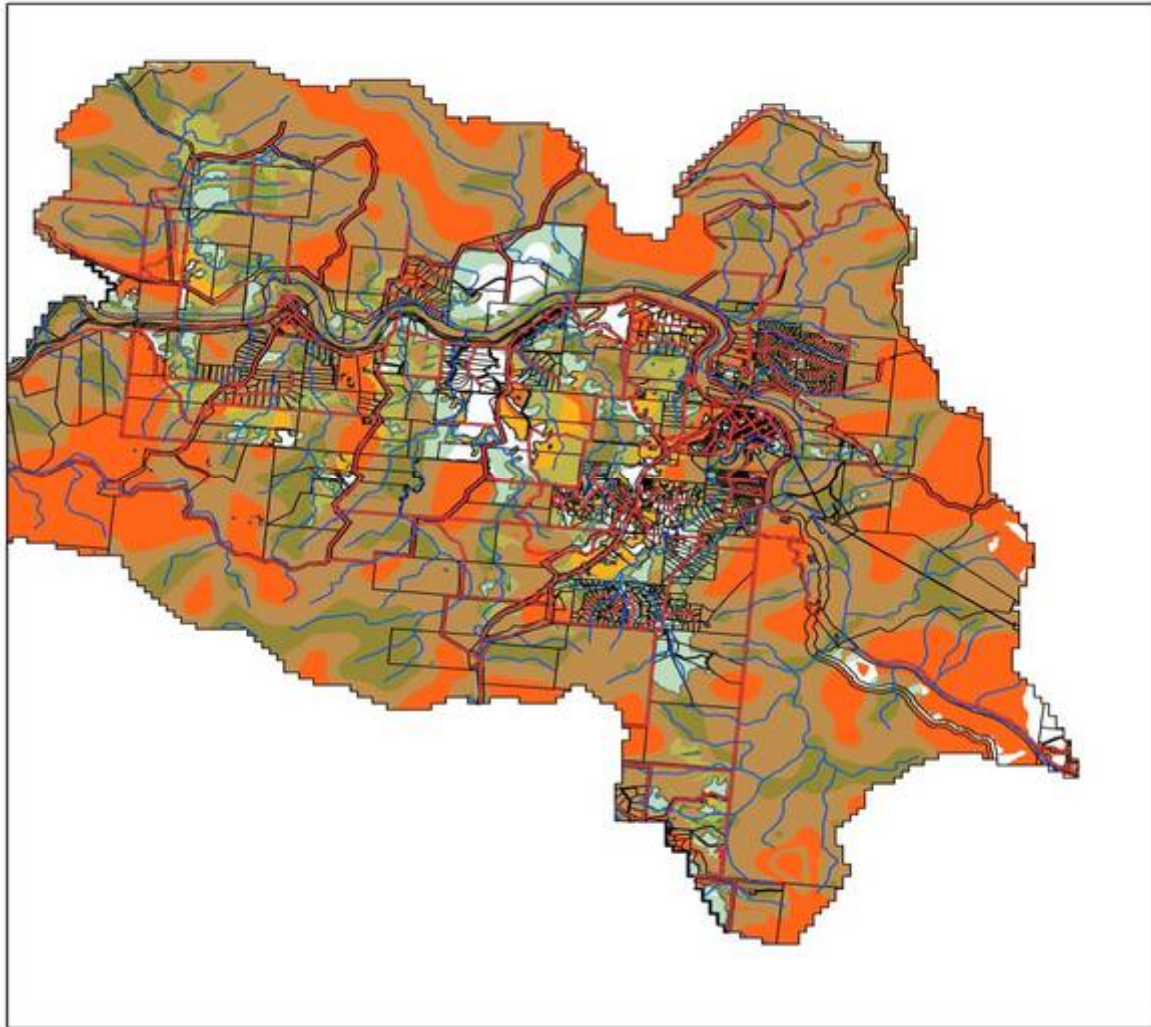
Invasive species  
Fire regimes  
Land-use

## Zoning

World Heritage Area  
2031 corridors  
National Parks  
Nature refuges  
Planning schemes



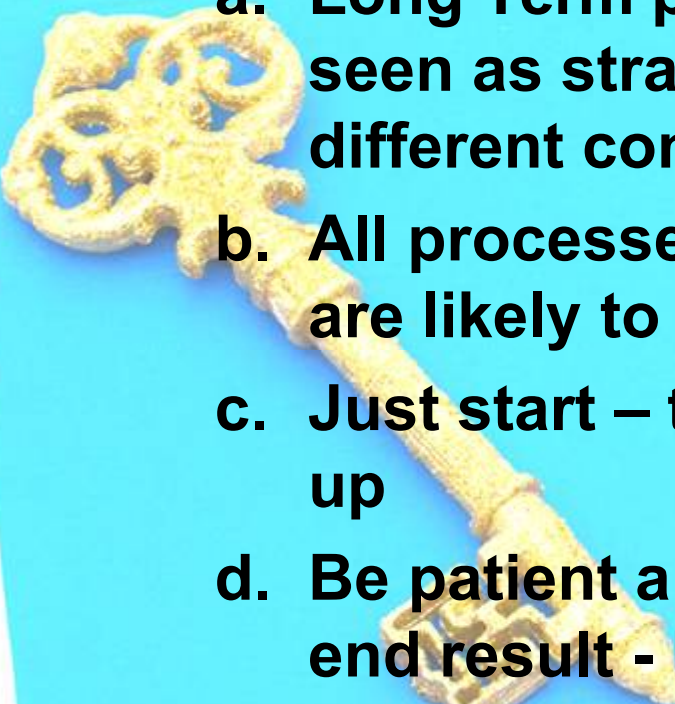
*Spatial analysis*



## CORRIDOR ANALYSIS

- HIAEC\_CORRIDOR DRAFT
- HIAEC\_CORRIDOR\_HOTSPOT
- BCA\_GES
- BCA\_HES

## **In summary:**

- 
- a. Long Term planning processes should all be seen as strategic planning processes with a different context**
  - b. All processes need to recognise other plans are likely to exist and will inform**
  - c. Just start – the ducks are never going to line up**
  - d. Be patient and persistent with your eye on the end result - Don't expect perfection in your plans first time round**
  - e. LoS is your balancing/negotiation point**

**Thank you for listening**

**Questions??????**

# Spotlight on Asset Management

*Current regime, framework and implementation – Case Study*



Far North Queensland Regional Organisation Of Councils

**Darlene Irvine, Executive Officer**



## **Long Term Strategic planning Framework:**

- ❖ **Reflects the future of a local government area**
- ❖ **Represents a community's views, visions and values**
- ❖ **Council's response through corporate plan, long term financial plan, long term asset management plan and strategic land use planning.**



# Included in a strategic framework:

- Settlement pattern
- Access & mobility
- Infrastructure & Services
- Natural environment
- Natural resources and landscapes
- Community Identity
- Strong Communities
- Economic Development
- Governance

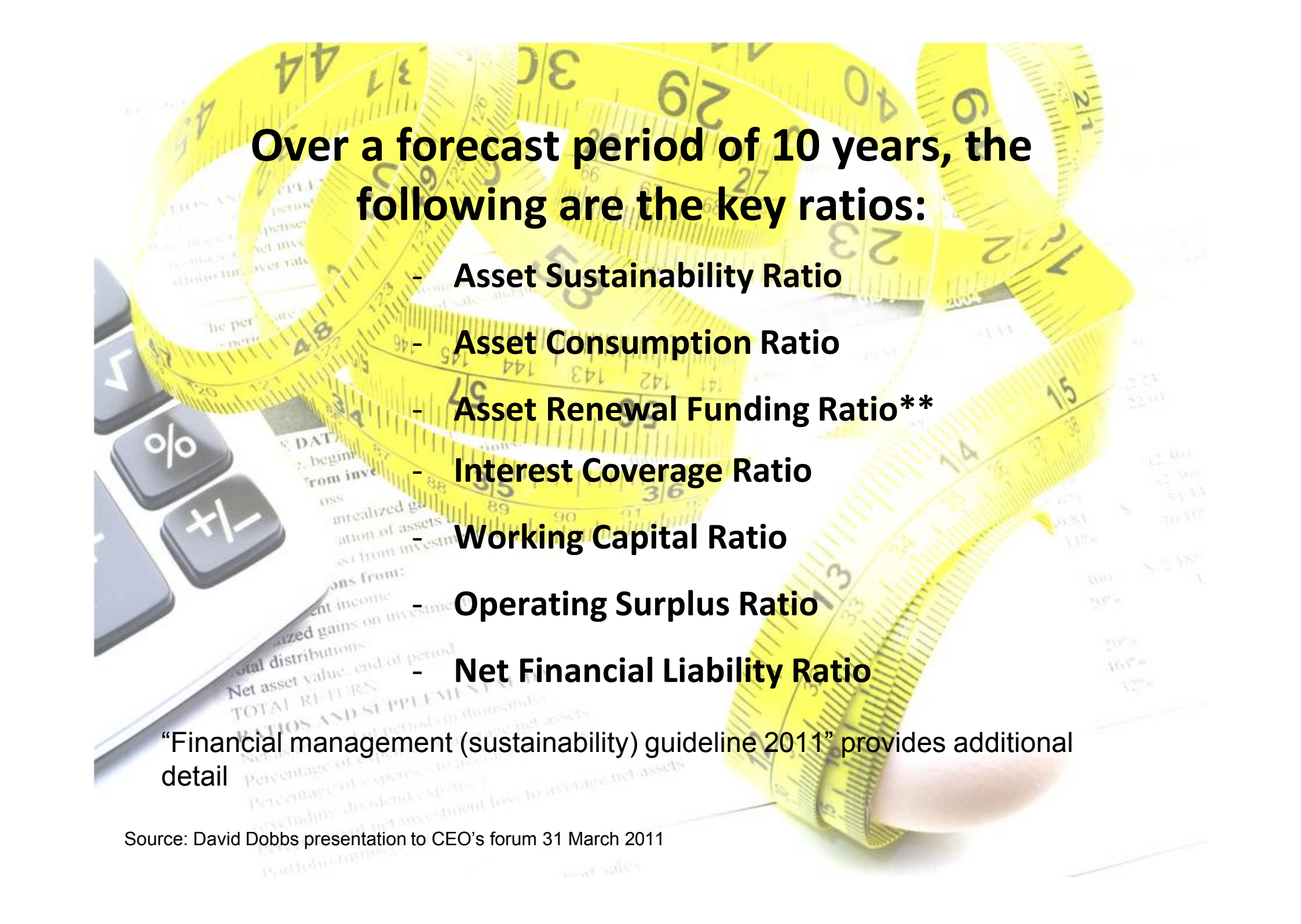


## **Sustainability is a strategy**

“A local government is financially sustainable if the local government is able to maintain its financial capital and infrastructure capital over the long term”

### **A Council is sustainable if:**

- It has long term asset Management plans
- It has linked these plans to its long term financial forecasts
- It can manage the financial implications in the long term



**Over a forecast period of 10 years, the following are the key ratios:**

- **Asset Sustainability Ratio**
- **Asset Consumption Ratio**
- **Asset Renewal Funding Ratio\*\***
- **Interest Coverage Ratio**
- **Working Capital Ratio**
- **Operating Surplus Ratio**
- **Net Financial Liability Ratio**

“Financial management (sustainability) guideline 2011” provides additional detail



# Far North Queensland Regional Organisation Of Councils

Financial Sustainability	Legend Assessment:									
						Good		Reasonable		Issue
	10 Year Forecast Assessment									
Ratio	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Asset Sustainability										
Asset consumption										
Asset Renewal Funding**										
Interest coverage										
Working capital										
Operating Surplus										
Net Financial liabilities										

The emphasis is on the strategy being employed by the council, with the indicators used to identify any future emerging issues.



Within the Asset Management Framework, the integration of the financial management planning processes include:

- Services, Service Levels, Costs and Risks
- Separate consideration of renewals v upgrades v new assets related expenditures
- The integration of those asset forecasts into the long term financial forecast
- The review or revision of the rating methodologies and revenue policy
- Consideration of the use of loan borrowings to fund infrastructure investments

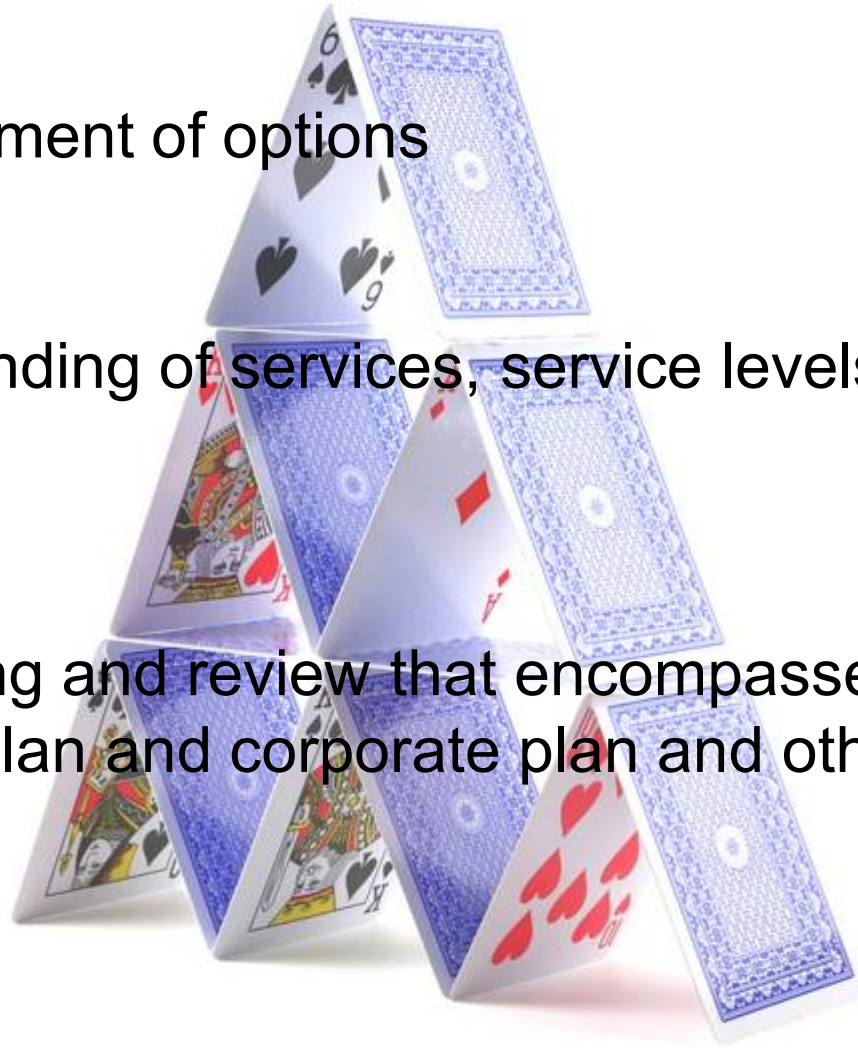




The development of options

An understanding of services, service levels, costs and risks

Priority setting and review that encompasses the community plan and corporate plan and other key plans





## Far North Queensland Regional Organisation Of Councils



- **223,000 sq km**
  - **Population of approx 260,000**
- Cairns Regional Council**
- Cassowary Coast Regional Council**
- Tablelands Regional Council**
- Cook Shire Council**
- Hinchinbrook Shire Council**
- Etheridge Shire Council**
- Croydon Shire Council**
- Wujal Wujal Aboriginal Shire Council**
- Yarrabah Aboriginal Shire Council**



2010

Far North Queensland Regional Organisation of Councils

# Regional Asset Management Strategy

*(Infrastructure Asset Management and Service Delivery)*



1. What is the current state of assets?

s?

2. What is the current state of assets, and what are the risks?

assets,

3. What position will we be in 10, 15 and 20 years?

, in 10,



## Three significant questions

Ascertaining the lifecycle of assets and  
determining our risk portfolio across  
these assets for the next  
5, 10, 20 years



# Some of the challenges facing LG in Qld include:

- Increasing community expectation for expansion of services and service levels
- Changing population profiles, with population growth management issues in many areas and decline in others
- Costs increasing at a greater rate than the CPI
- The replacement of ageing infrastructure
- The 'tree' and 'sea change' phenomena facing coastal and hinterland
- Provision of new services (aged care etc) not previously provided, and
- Compliance with increasing legislative, legal and governance requirements

1. Linking policies and strategies with a Long Term Program
2. Develop Infrastructure Service Delivery Plans and Long Term Financial Plans
3. Develop Long Term Asset Management Plans Including Risk Management Plans



## Key Findings

# 1. Population trends and environmental performance

- ? How should we plan and fund asset renewal?
- ? Are there environmental, social and cultural limitations?
- ? Should rural communities operate as self-sustaining economic business units?
- ❖ Many assets built in growth booms will need renewal within the next 20 years
- ? What role do rural communities play in the social and cultural well being of a country?
- ? How can we identify national or regional benefits?
- ? Central governments support 'growth', should they also support 'decline'?



2. Transport Trends
3. Cost Shifting and Funding
4. Responsibility of Custodianship
5. Increasing Community Expectation
6. Skills Shortages
7. Changing Regulation
8. National Trends



# Strategy Complete – What now?

What services do we currently deliver to the community through our infrastructure?

At what cost?



# Community Plans & Levels of Service

- Council LT community plans
- Levels of Service vital to community consultation
- Affordability & consistency
- What do you want?
- What can Council afford?
- How much are you prepared to pay for what you want?
- SORRY or NO PROBLEM!



**Service**

## Levels of Service Frameworks

- **Commenced with Parks & Sporting Facilities – Easy??!!  
not so #%&! easy!!**
- **Completed Buildings and Roads**
- **Regular workshops - all local governments represented**
- **Strong leadership at political level**
- **Collaboration at staff level**
- **Absence of completed existing frameworks**

# Levels of Service Frameworks

- Adopted NZ NAMS reference *“Developing Levels of Service and Performance Measures”* as guide
- Quite detailed and complex but very thorough
- Levels of service need to be measurable in some form
- FNQROC framework → simple but useful



# Levels of Service Framework for FNQROC

- Customer Value
- Customer Level of Service
- Technical Level of Service / Performance Measure





# Customer Value - Accessibility

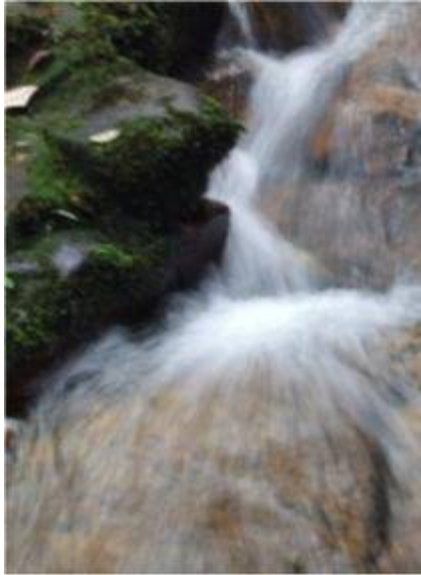
Customer Level of Service Standard	Technical Level of Service / Performance Indicator
Adequate & usable park space provided	Hectares of park provided per 1000 head of population
	Size of park - minimum, median, maximum (hectares)
	Slope of park (fall - 1 in x)
	Flood immunity of park (% above say ARI 50 level)
	No. of complaints received about overcrowding (per annum)
Parks are located within walking distance of homes	% of parks with safe walking access and / or path links
	% of urban residents live within 1000m of a park
Parks have adequate on / off street parking	No. of complaints received from residents near parks about parking congestion (per annum)
	No. of complaints received from park users about parking (per annum)
Parks are easily accessible by public transport	% of parks have bus stop located with 300m
Parks are wheelchair accessible	% of parks are wheelchair accessible
	% of parks that cater for disabled parking
	No. of complaints received about disabled access to parks (per annum)
Parks are available for public / private functions	% requests for use are condition approved

## What next?

- LGs currently trialing Parks LoS framework
- Determining current LoS and costing
- Over-Servicing / Under-Servicing / Just Right?
- Minimum and Desired LoS in future



# Introducing natural assets



*“An area of natural vegetation or land that is not used for the defined purpose of a sporting facility or park?”*

# Local Government Natural Assets – Where are they?



Low integrity



High integrity

# Open Spaces (Natural areas)

Parcel types that are covered in this category might include;

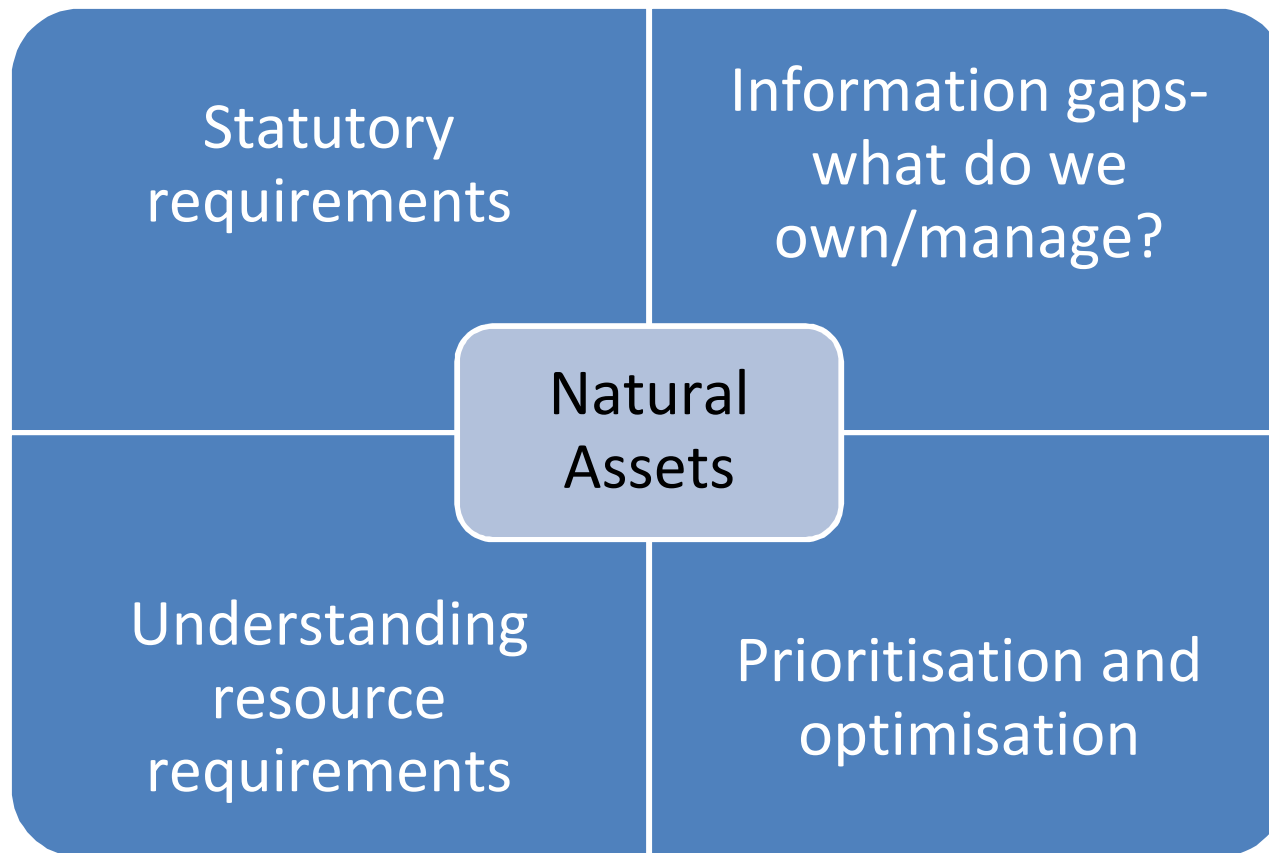
- RESERVES FOR CONSERVATION
- COASTAL AND FORESHORE RESERVES AND ESPLANADES
- DRAINAGE RESERVES AND ESPLANADES



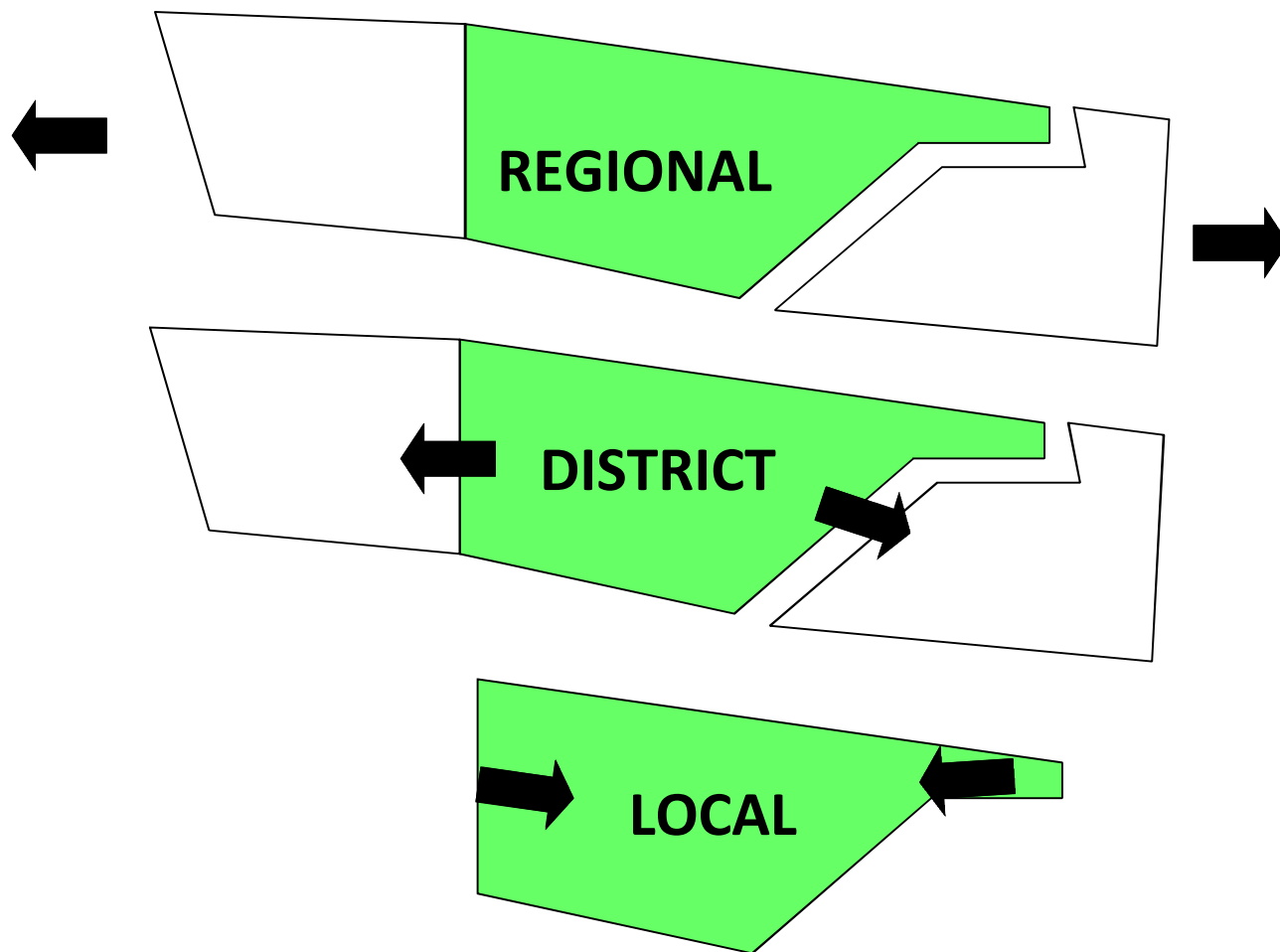
Other parcel types that contain natural areas;

- RESERVES FOR DUMPING
- QUARRY RESERVES
- ROAD RESERVES AND EASEMENTS
- LAND WITH OTHER UNALLOCATED USE
- RESERVE FOR CAMPING RECREATION & PARK
- RESERVE FOR LOCAL GOVT (BOAT HARBOUR)
- RESERVE FOR SCENIC & RECREATION PURPOSES
- RESERVE FOR PARK
- WATER SUPPLY RESERVE
- RESERVE FOR SCENIC PURPOSES
- RESERVE FOR CAMPING & GRAVEL PURPOSES
- STOCK RESERVES
- RIVER IMPROVEMENT TRUST SITES (PENDING)

# Origins of a natural asset approach



# Describing the Natural Asset- asset classes



# Natural Assets – Technical levels of service

	LEGILSATED PESTS	RUBBISH DUMPING	PEST MAPPING	FIRE (FRB)	PASSIVE REHABILITAION	UNAUTHORISED ACCESS	ENVIRONMENTAL PESTS	FAUNAL ASSETS	MANAGEMENT PLAN	COMMUNITY ENGAGEMENT	MONOTORING PROGRAM	ECOLOGICAL FIRE	REVEGETATION
Regional													
District													
Local													

## *A few truths about us (the region) and natural assets*

- *Good to great knowledge of a small number of our natural assets (low hanging fruit)*
- *Little to no information on most (distribution, scale, condition)*
- *Creatures of habit (same places doing the same thing)*
- *Little to no understanding and forward planning in the economics of management (cost:benefit)*
- *Difficulty in articulating the needs of natural world beyond the emotive (do the right thing)*
- *Locked into responding to cyclical and opportunistic investment (because we are yet to emphatically demonstrate otherwise)*

# Natural Asset Methodology



- Combines all relevant spatial data into parcel description
- Data validation

- Expert validation
- Additional information
- Classification

- Management/ O & M requirements
- Additional information



***Basic framework-3 stages***

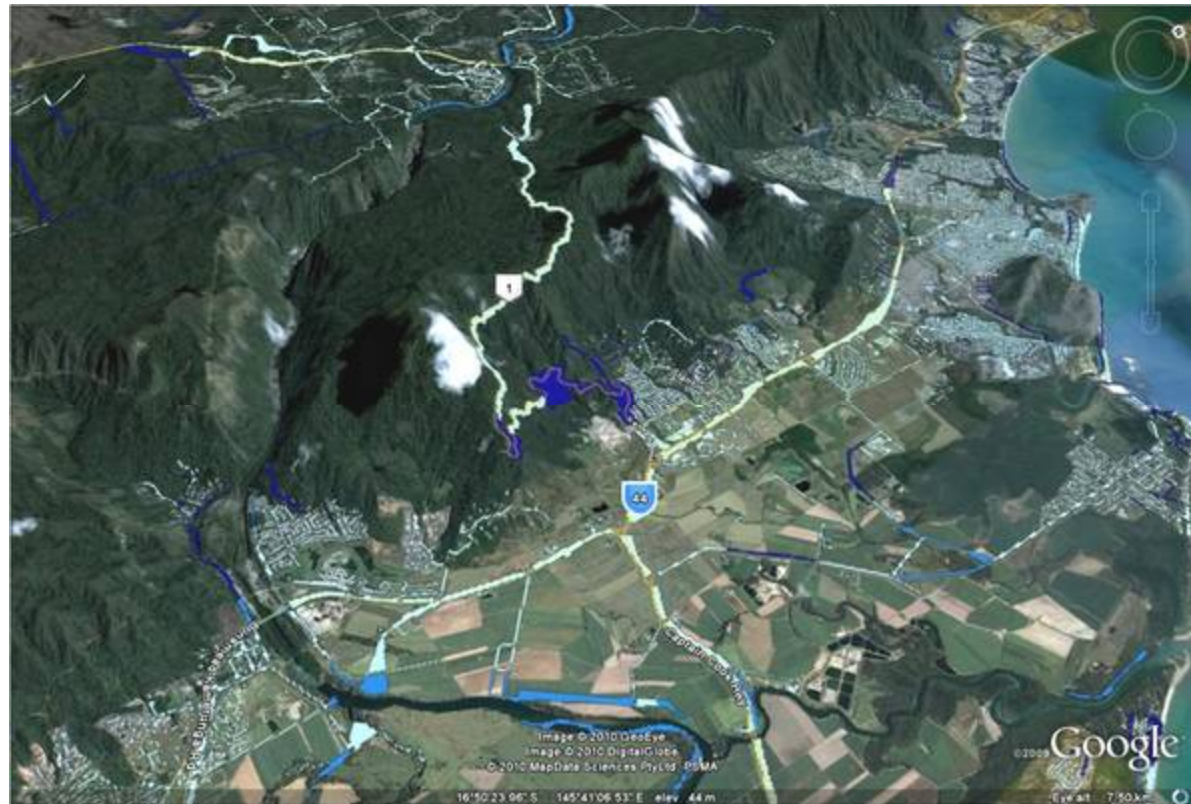


# Data sets

# End product

## *Regional natural areas/assets data set*

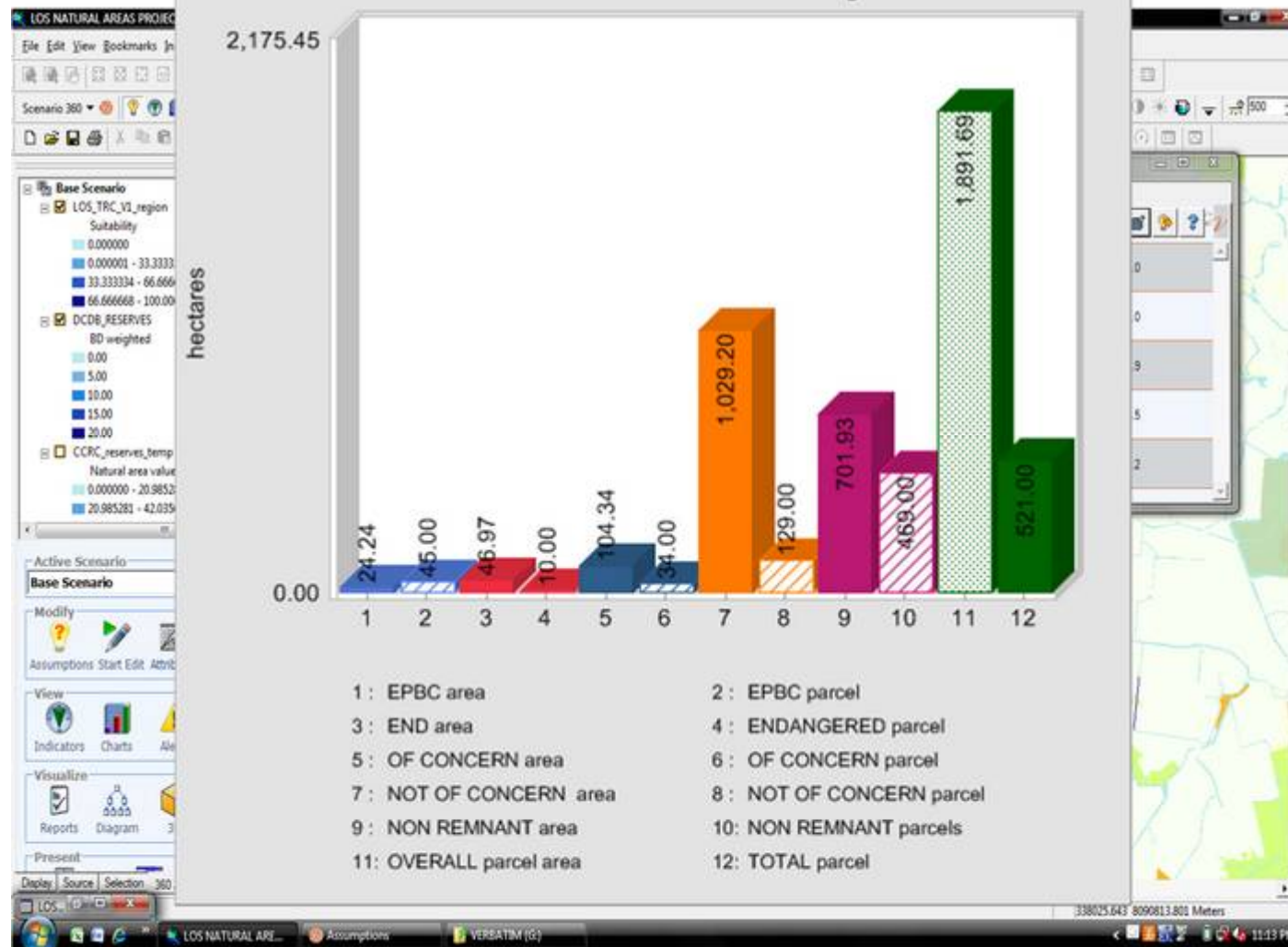
*(TAB, .shp, .xls, .kmz, .dbf ...etc)*



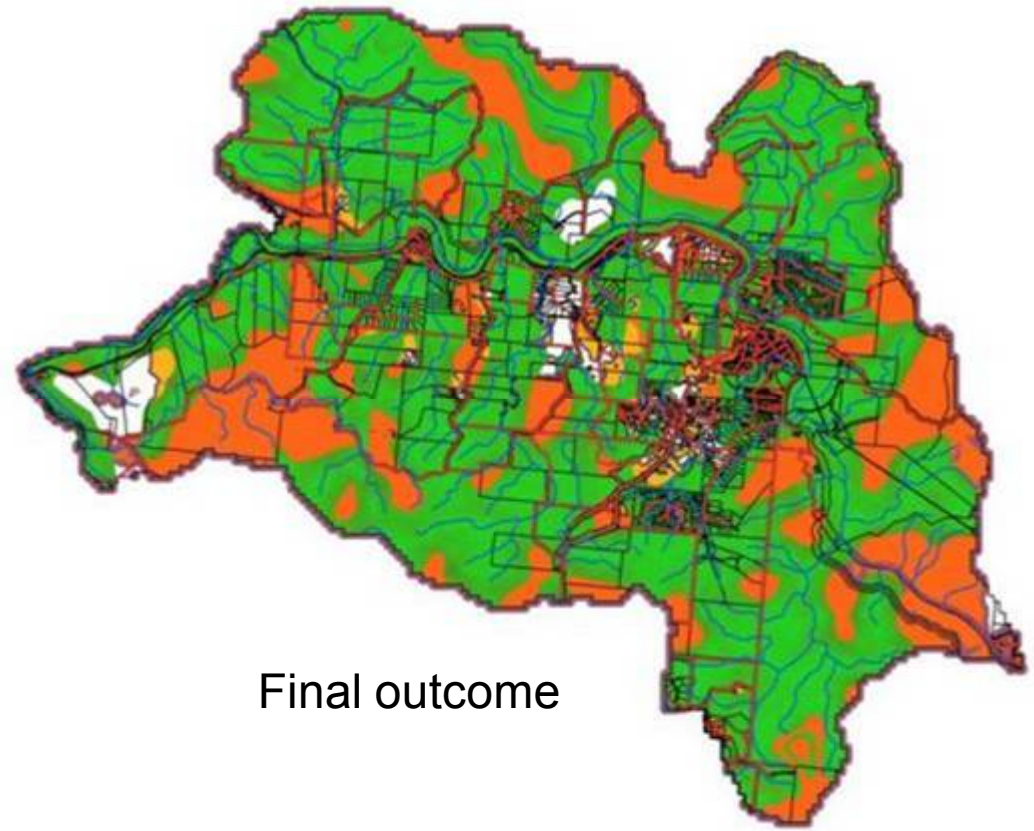
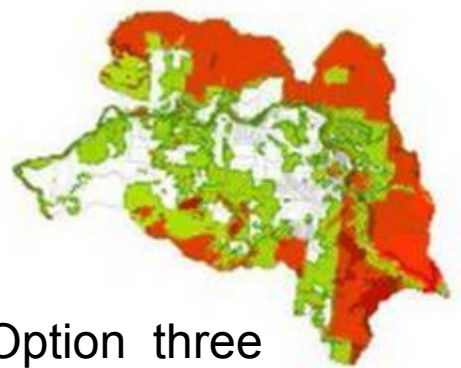
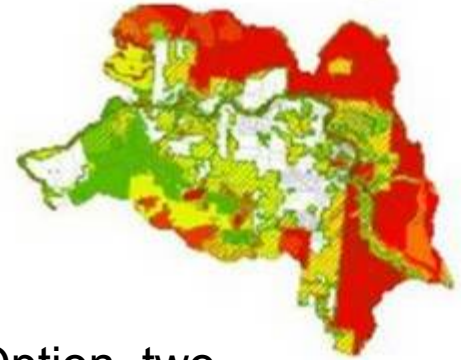
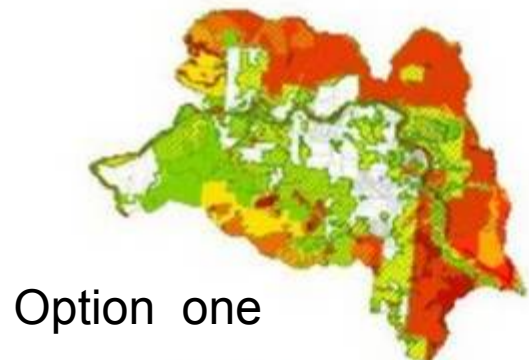
# Products

# End products

## TRC summary



# Products

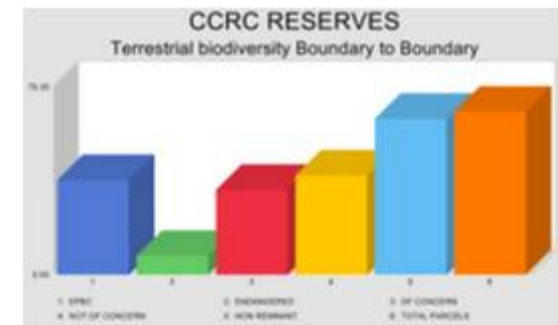
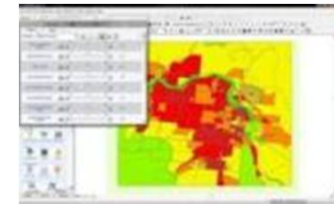
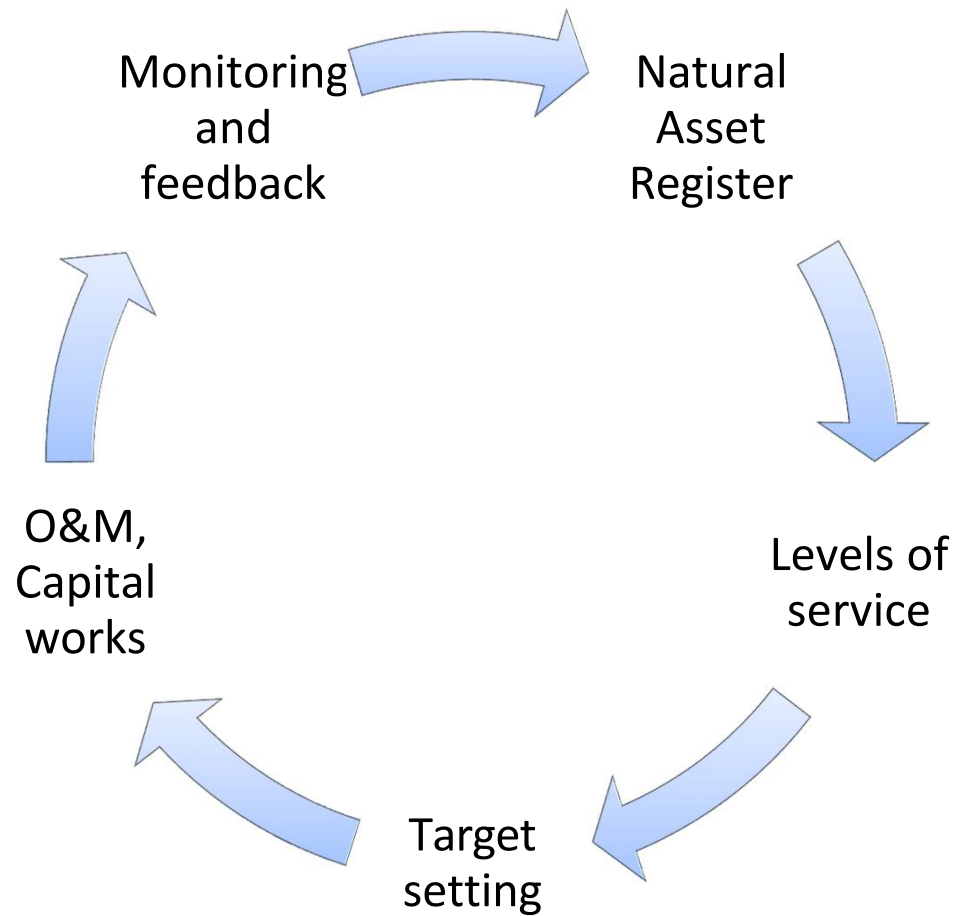


*“Using scenarios in the decision making process”*

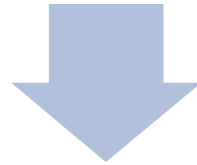


# *Adaptation to planning*

# Final product - Asset Management Plan



Natural Asset  
Planning Project

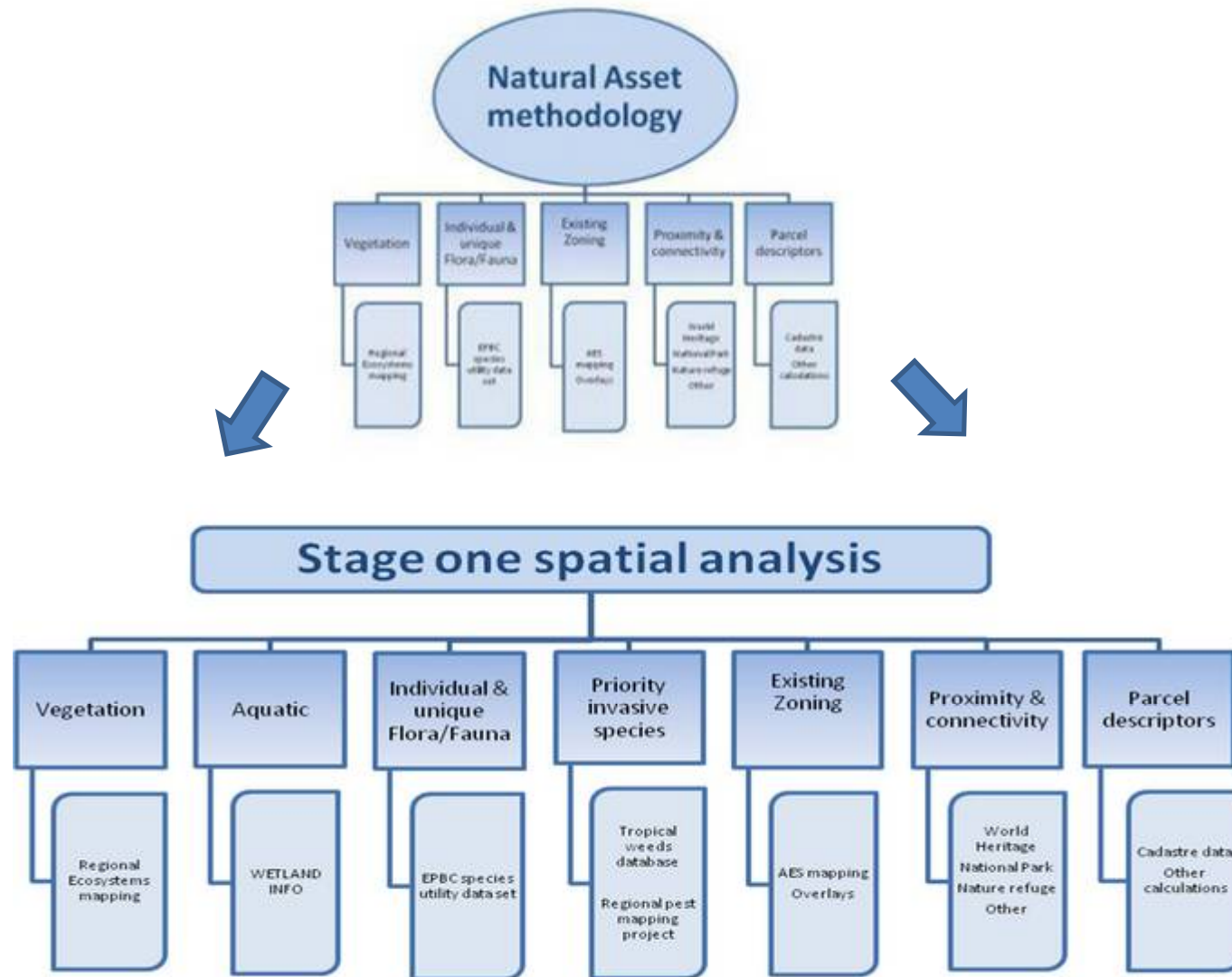


Interactive  
Biodiversity  
Assessment &  
Planning Framework

*“The evolution  
of one concept  
into many”*

## Key attributes (parcel)

- *Area (each bio-diversity attribute, other open space)*
- *% cover (each bio-diversity attribute, other open space)*
- *Proximity zoning (WHA, National Parks, other high reserves)*
- *Proximity other features (beach fronts, drainage, riparian wetlands)*
- *Distance along networks (2031 corridors)*
- *Specific values tabled (regional ecosystems)*
- *Presence/absence of pests & weeds*



*“Expanding the content to include more information relevant to planning decisions”*



***Adaptation to planning***

# Biodiversity

## *Flora*

3,000+ plant species

210 families

17% of Australia's vascular plants

(Wet Tropics Management Authority)

## *Fauna*

Cassowary, Mahogany  
Gliders, Tree Kangaroo,  
Crocodiles etc.



# Invasives....

## 28+ species of feral vertebrates

- pigs
- dogs
- cats
- cane toads
- deer
- exotic fish

(Congdon & Harrison 2002)

## 540+ naturalised exotic plant species

- 85+ considered to be high priority for management
- 7 Weeds of National Significance
- 7 Species subject to National cost-shared eradication programs

## All the usual....

- Urbanisation
- Population growth
- Land clearing and degradation
- Climate change



# inputs

## Values

EPBC(National)  
Regional Ecosystems  
(State)  
Wetland data (State)

## Threats

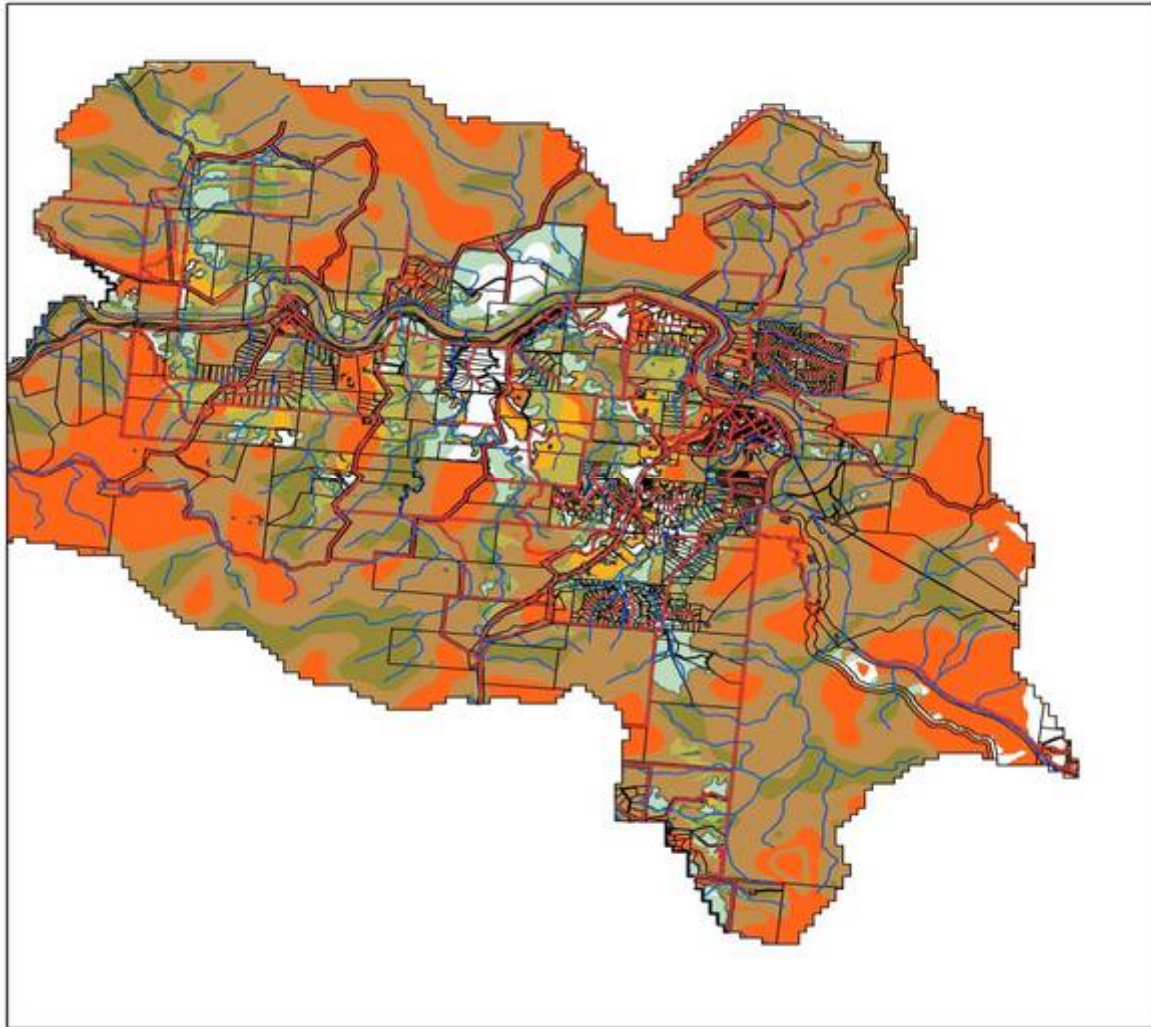
Invasive species  
Fire regimes  
Land-use

## Zoning

World Heritage Area  
2031 corridors  
National Parks  
Nature refuges  
Planning schemes



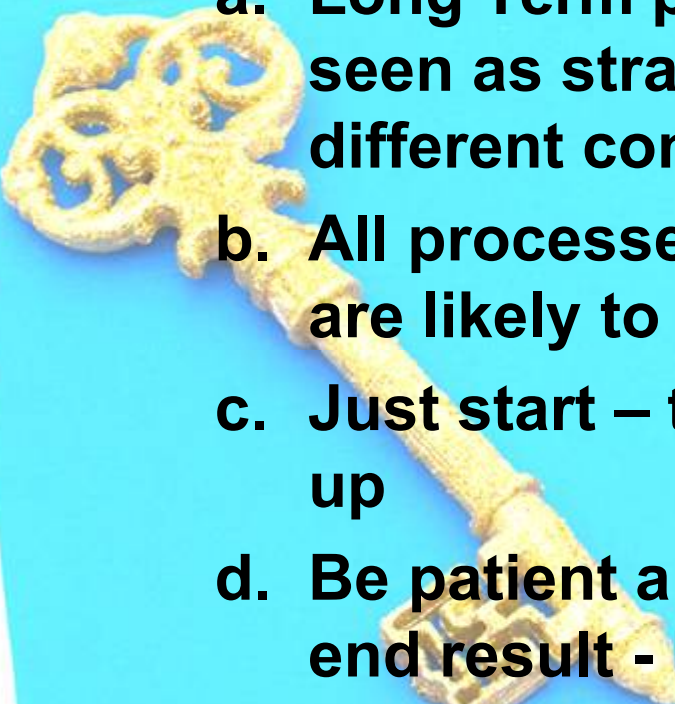
***Spatial analysis***



## CORRIDOR ANALYSIS

- HIAEC\_CORRIDOR DRAFT
- HIAEC\_CORRIDOR\_HOTSPOT
- BCA\_GES
- BCA\_HES

## **In summary:**

- 
- a. Long Term planning processes should all be seen as strategic planning processes with a different context**
  - b. All processes need to recognise other plans are likely to exist and will inform**
  - c. Just start – the ducks are never going to line up**
  - d. Be patient and persistent with your eye on the end result - Don't expect perfection in your plans first time round**
  - e. LoS is your balancing/negotiation point**

**Thank you for listening**

**Questions??????**