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## Maroochy Biodiversity Strategy

Workshop: Expert Panel



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## Introduction 1

- Welcome
- Goals of the workshop:
  - Brief you on the current status of the project
  - Gain feedback on the products that are now commencing to flow and on the direction that is being taken
  - Discuss and provide direction on the programmes currently in operation in Maroochy Shire - where possible in the context of the findings from the project products
- Relationship to previous workshops
- Status of documentation and reporting
- Resources available
- Housekeeping

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## Introduction 2

- Agenda
- Participant introductions

9:30 Introduction	11:30 Programme Analysis
9:40 Project Context	11:50 Community Survey
9:55 BAMM	12:00 Where To From Here
10:05 Morning Tea	12:15 Lunch
10:20 Habitat Landscape Values, Opportunities & Threats	12:45 Open Programme Discussion
11:00 Synthesis of Values & Threats	14:00 Close & Thanks

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## Project Context 1

- Goal of the project:
  - To prepare a Biodiversity Strategy for the Maroochy Shire that will guide successful management and preservation of the Shire's extensive biodiversity attributes. A key aspect of the project is to assess the capacity of current biodiversity-oriented MSC initiatives to deliver objectives of the strategy and if necessary to re-develop Council's approach to biodiversity.
- Three stage process:
  - **Stage 1** Identification of the biodiversity values and their location within the Shire.
  - **Stage 2** Identification of threatening processes to biodiversity values and subsequent identification of priority areas and species for biodiversity management.
  - **Stage 3** Consideration of the effectiveness of current Council programs and structures to address identified threats and risks and identification of additional opportunities and initiatives for successfully managing biodiversity within the Shire.
- Concurrent stages

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## BAMM: Overview

- The BAMM is used by the EPA and Queensland local governments to assess the conservation significance of areas of remnant vegetation within the State.
- The BAMM Version 2.1 July 2002 was used in conjunction with the Shires new regional ecosystem (RE) mapping as one facet in the identification of biodiversity values for the Maroochy Shire Biodiversity Strategy.
- The methodology is useful for identifying different components of biodiversity values such as those associated with threatened ecosystems, threatened flora and fauna species, and large tracts of habitat in good condition.
- The BAMM uses seven Diagnostic Criteria and Other Essential Criteria to assess biodiversity attributes of remnant RE (polygons) as delineated on RE maps.
- Rankings for each criterion include 'very high', 'high', 'medium' and 'low'.

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## BAMM: Difficulties

- The BAMM mapping was undertaken from April 2004 to February 2005. Extensive time delays occurred due to:
  - The need to have the Shire's regional ecosystem mapping verified by the Queensland Herbarium.
  - The information required to undertake the state and regional level criterion was not available from the EPA during the course of the project.
- An overall map indicating the conservation significance of each remnant vegetation unit has not been able to be produced due to the lack of regional information.
- At this stage the BAMM maps are displayed as individual criterion and no overall state, regional or local level conservation significance values have been determined.
- In October 2005 when the next version of the SEQ Biodiversity Planning Assessment is released by the EPA, this overall significance map will be able to be produced.

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**BAMM: Baseline Vegetation Data**

- The November 2004 version of the RE mapping was used as the baseline vegetation layer for the BAMM Mapping.
- The number of hectares of remnant vegetation in each RE category included:
  - Endangered = 3, 044.6ha
  - Of Concern = 12, 276.2ha
  - Not of Concern = 38, 402.7ha
  - Total remnant vegetation = 53, 723.5ha
- Pre-clearing vegetation is considered the vegetation existing in the Shire prior to European settlement.
- Maroochy Shire had 115, 156.20ha of pre-clearing vegetation, therefore there is 46.65% of the Shire's original vegetation remaining.

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**BAMM: Endangered, Vulnerable or Rare (EVR) species lists**

- EVR lists compiled from existing data on EVR in Shire, includes migratory and other species under EPBC.
- Remarkable number of EVR flora and fauna for Shire.
  - 61 EVR fauna
  - 43 EVR flora
- Biomap project also valuable tool for identifying EVR values by modeling and mapping potential habitat.

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**BAMM: Shire Significant Species Lists**

- Lists of locally significant species other than EVR.
- SSS lists reviewed by BAMM expert panel, community expert panel, MSC ecologists, other community input.
- Comprises species that satisfy at least one of following:
  - listed as ROT under non-statutory conservation assessment;
  - distributional limit;
  - disjunctive/outlying population;
  - rare or poorly known in Shire;
  - at risk of local decline;
  - endemic to SEQ;
  - special ecological significance (e.g. foodplant of EVR).

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**BAMM: Criterion A - Essential Habitat for Endangered, Vulnerable and Rare Species**

- 261 records from the expert panel BAMM mapping workshop on 21 October 2004 were used for this criterion.
- Results are based on the accuracy of the records (e.g. the precision rating). Therefore the majority of the Shire's remnant vegetation was ranked as having a 'medium' value for Essential Habitat for EVR taxa.
- Over 35% of the Shire's remnant vegetation received a 'very high' ranking for essential habitat for threatened species.
- Key areas identified as having a 'very high' value for essential habitat included:
  - Conondale National Park/Kenilworth Forest Reserve
  - Noosa-Maroochy Wallum Corridor
  - Mooloolah River National Park
  - Scattered areas around Montville, Eudlo, Buderim and Yandina.

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**BAMM: Criterion B1 - State Ecosystem Value**

- Based on the "biodiversity status" of each RE, e.g. Endangered, Of Concern and uses the RE data for the SEQ bioregion.
- As the majority of the remnant vegetation in Maroochy Shire belongs to a "Not of Concern" RE, 65% of the remnant unit polygons were mapped as having a 'low' value.
- Over 4% of the remnant units were ranked as 'very high' and 6 of the Shire's 65 RE types were ranked as 'very high'.

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**BAMM: Criterion B2 - Regional Ecosystem Value**

- Maroochy Shire belongs to three subregions (Southern coastal lowlands, South East Hills and Ranges and Gympie Block) which were used for the Criterion B2 calculations.
- The majority of the Shire's remnant vegetation ranks as having a 'low' regional level ecosystem value, due to the considerable amounts of pre-clearing vegetation remaining compared to other Shire's in the subregion.

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**BAMM: Criterion B3 - Local Ecosystem Value**

- Based on the 'biodiversity status' of each RE for the local government area.
- The majority of the Shire's remnant vegetation was ranked as having a 'low' local ecosystem value, based on the amount of pre-clearing vegetation remaining.
- 6 REs received a ranking of 'very high' ecosystem value at the local level.

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**BAMM: Criterion C - Tract Size**

- This criterion is a measure of the relative size of a tract of vegetation, as an indicator of ecological significance.
- The results for Criterion C show that nearly 60% of the remnant vegetation in the Shire belongs to a tract that is ranked as 'very high'.
- The main areas with 'very high' tract sizes include the:
  - Noosa-Maroochy Wallum Corridor
  - Mapleton Forest Reserve/Forest Reserve 3
  - Maroochy-Noosa Wallum Corridor

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**BAMM: Criterion D1 - State Relative Ecosystem Size**

- Based on the analysis of the size of RE's within the SEQ bioregion.
- The majority of the Shire's remnant vegetation received a 'low' ranking.
- Nearly 10% of the remnant vegetation ranked as 'very high' including areas of Mapleton Forest Reserve and Conondale National Park.

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**BAMM: Criterion D2 - Regional Relative Ecosystem Size**

- Defined according to the analysis of RE sizes within the three subregions that Maroochy Shire belongs to.
- The majority of remnant vegetation is ranked as 'low'. This is due to the fragmented nature of the Shire's remnant vegetation.
- The areas were 'very high' rankings occur include:
  - Mooloolah River National Park
  - Scattered remnants around Buderim, Eudlo and Mapleton
  - Conondale National Park

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**BAMM: Criterion D3 - Local Relative Ecosystem Size**

- Defined according to the analysis of Regional Ecosystems within the Local Government Area.
- The results were spread across the rankings with similar percentages attributed to the 'low' and 'very high' categories.
- Each RE received at least one 'very high' ranking for an individual RE polygon.
- Key areas with very high rankings included scattered sections of the:
  - Conondale National Park/Kenilworth Forest Reserve
  - Mapleton Forest Reserve
  - Noosa-Maroochy Wallum Corridor
- For each of Criterion D1, D2 and D3 no individual RE received a 'low' ranking across each criterion.

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**BAMM: Criterion E - Condition**

- This criterion ranks all remnant vegetation as having a 'very high' condition value, as it meets the Vegetation Management Act 1999 test for the qualities of remnant vegetation.
- The impact of invasive species and other threatening processes impacting upon the condition of remnant vegetation are not taken into consideration.
- Therefore the mapping for this criterion has been deemed as not being an accurate reflection of the condition values of the Shire's remnant vegetation.

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**BAMM: Criterion F - Ecosystem Diversity**

- Simpson's Diversity Index is used to represent the "richness" and "evenness" of the Shire's remnant vegetation.
- Nearly 60% of the Shire's remnant vegetation was ranked as having a 'high' value for ecosystem diversity.

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**BAMM: Criterion G - Context and Connection**

- Based on the extent to which the remnant unit incorporates borders or buffers (e.g. adjoining vegetation of a different RE type).
- A very high ranking resulted for 46% of the Shire's remnant vegetation. The main areas with very high rankings included:
  - Conondale National Park/Kenilworth Forest Reserve
  - Mapleton Forest Reserve/Forest Reserve 3
  - Noosa – Maroochy Wallum Corridor

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**BAMM: Criterion H - Core Habitat for Priority Taxa**

- This criterion identifies Essential and General Habitat for EVR and other priority taxa additional to those mapped under Criterion A.
- 680 fauna records were mapped for 48 priority species, 280 of these records were provided by the Faunawatch program.
- Records for 24 species from the Shire Significant Species list were mapped (records were not available for all species).

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**BAMM: Criterion J - Corridors**

- At the expert panel workshop on 21<sup>st</sup> October 2004, the EPA's bioregional corridors were adopted and given a ranking of state conservation significance.
- Wildlife corridors/linkages of regional and local conservation significance were nominated.
- The wildlife corridors identified in the SCEC Habitat 2000 report were adopted by the panel and given a ranking of regional significance.
- Some regrowth vegetation was included in the corridors if it provided important stepping stones to remnant vegetation patches.
- The expert panel added additional corridors of regional conservation significance including:-
  - Forest Glen
  - Diddillibah
  - Kiel Mountain
  - Ninderry
  - Noosa-Maroochy State Forest
  - Walli to Blackall Range

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**Habitat Landscape Values, Opportunities & Threats**

- [Report Values & Threats Workshop](#)
- [Core, Mosaic, Link Workspace](#)

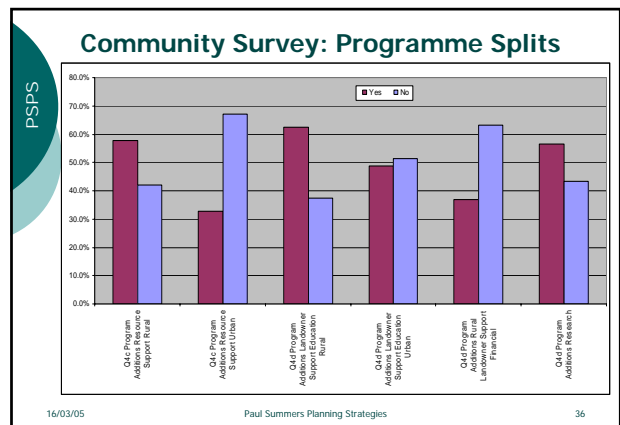
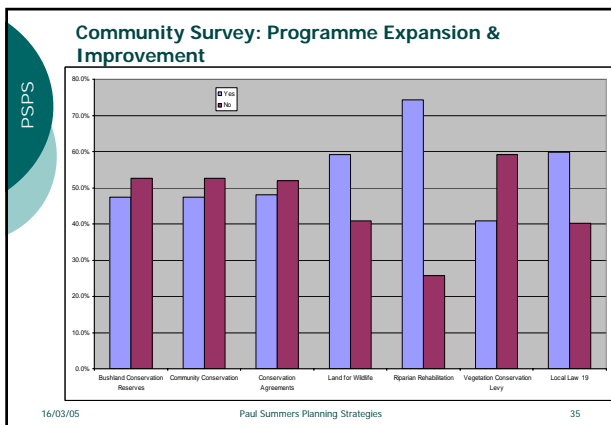
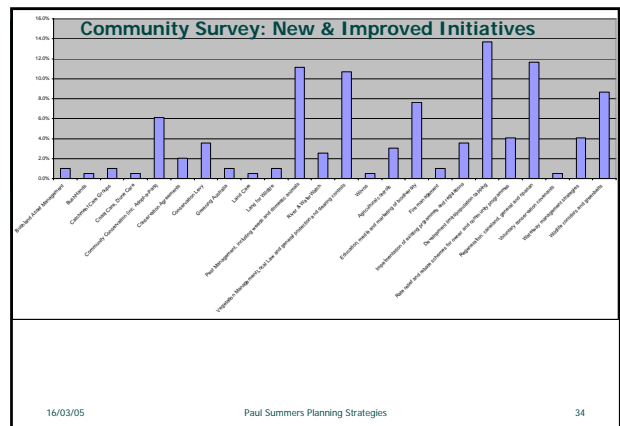
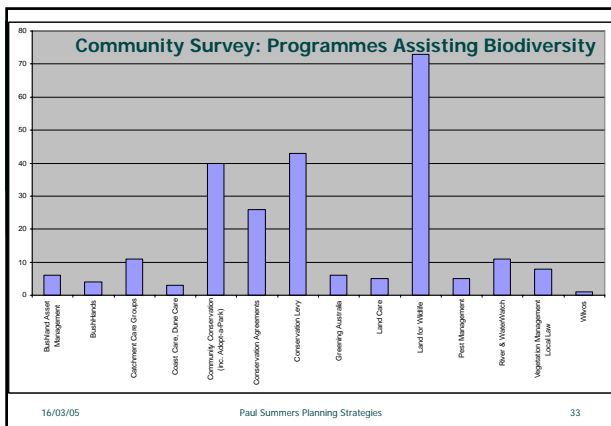
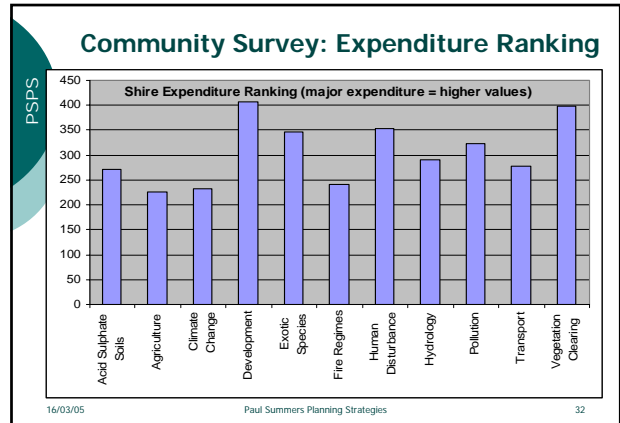
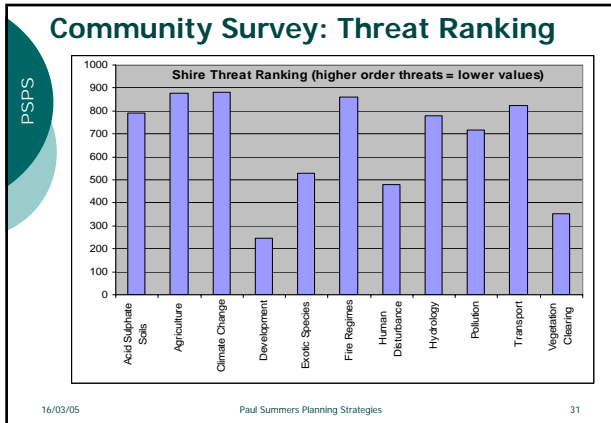
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**Synthesis of Values & Threats**

- The processes used to synthesise values and threats
- The outputs of the exercise:
  - Mapping: [Maroochy Plan 2000 vs Regional Ecosystems](#)
  - Mapping: [SEQ Regional Plan vs Regional Ecosystems](#)
  - Statistics: [Statistics Planning Threat](#)
- The struggle to deal with the BAMM product through similar processes
- The intent to deal with the core and mosaic layers in a similar way

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**Other Biodiversity Programs**

- Pest Management Planning
- Bushland Conservation Reserves Asset Management and Planning
- Community Conservation Program
- Ecosystem Health monitoring programs
- Environmental grants

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**Open Program Discussion 1: Overall Theme**

- What is the best biodiversity “tool kit” to ensure effective protection, management and enhancement of the Shire’s significant biodiversity values?
  - Specific responses for the ‘urban’, ‘rural’ and ‘conservation area network’ landscapes of Maroochy Shire are welcomed.
  - Biodiversity protection on private land needs to be improved.

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**Open Program Discussion 2**

- Review of existing programs
  - Any further comments on the perceived advantages and disadvantages of existing programs?
- Future investment in biodiversity programs
  - What programs do the group believe will still respond to the threats impacting upon biodiversity values in the future? (e.g. where should resources be invested?)
  - Which (if any) existing programs should be expanded and if so how?

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**Open Program Discussion 3**

- Connectivity
  - What is the best way for Council to retain significant corridors/linkages across the urban and rural landscapes?
- Best practice programs
  - What effective programs do you know of that are being undertaken elsewhere that would be useful for MSC to investigate?

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**Open Program Discussion 4**

- Partnerships
  - How can Council develop better partnerships with community groups and other government agencies?
  - Ecosystem health and monitoring programs?
- Capacity Building
  - In the existing environmental programs, how could we positively address ‘barriers to participation’ that are commonly experienced?

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**Open Program Discussion 5**

- Incentives
  - What incentives need to be provided to improve participation in environmental programs, particularly in the rural sector?
- Education and awareness
  - What improvements can the group suggest for improving the awareness of the Shire’s significant biodiversity values?

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