

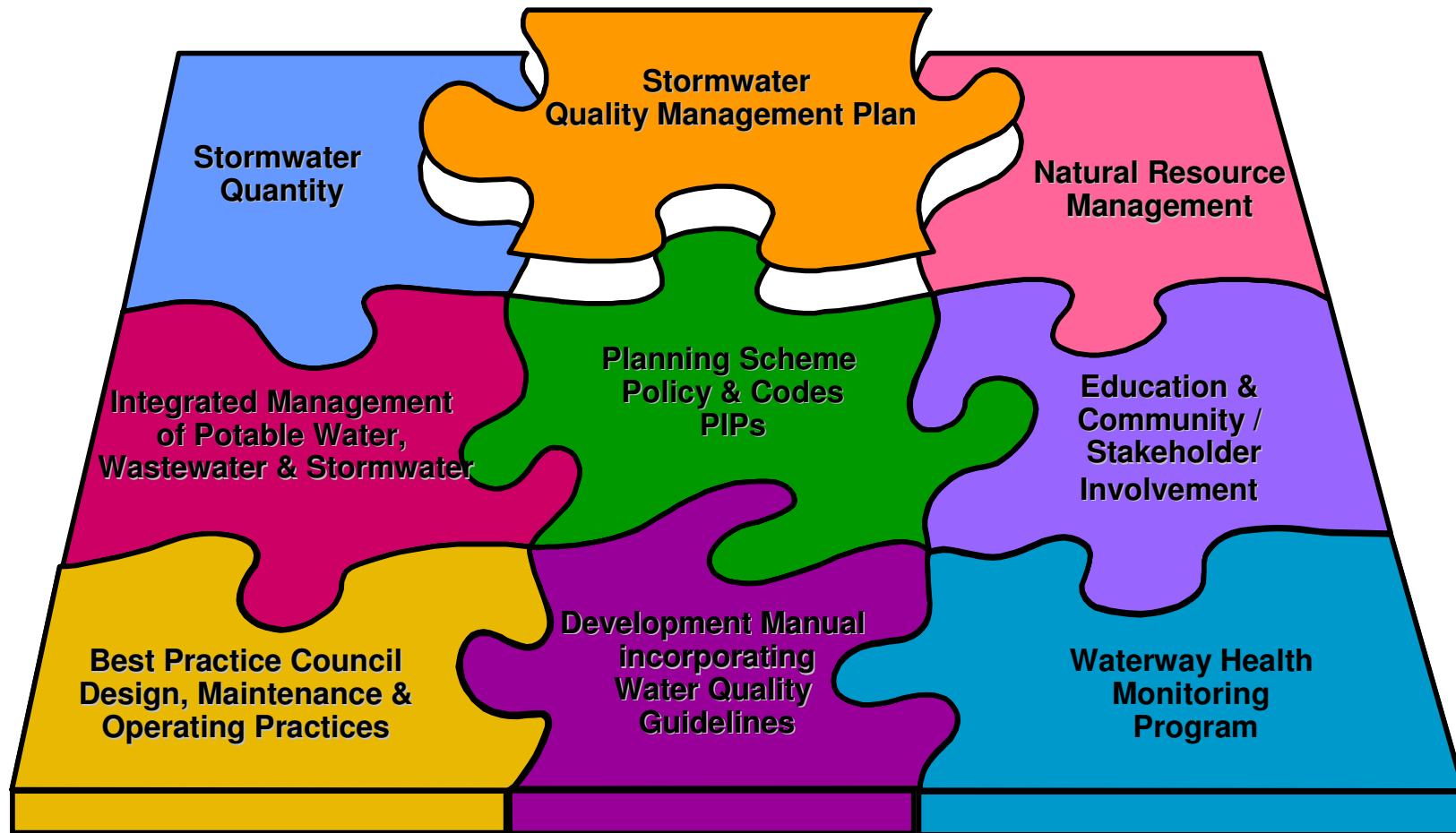


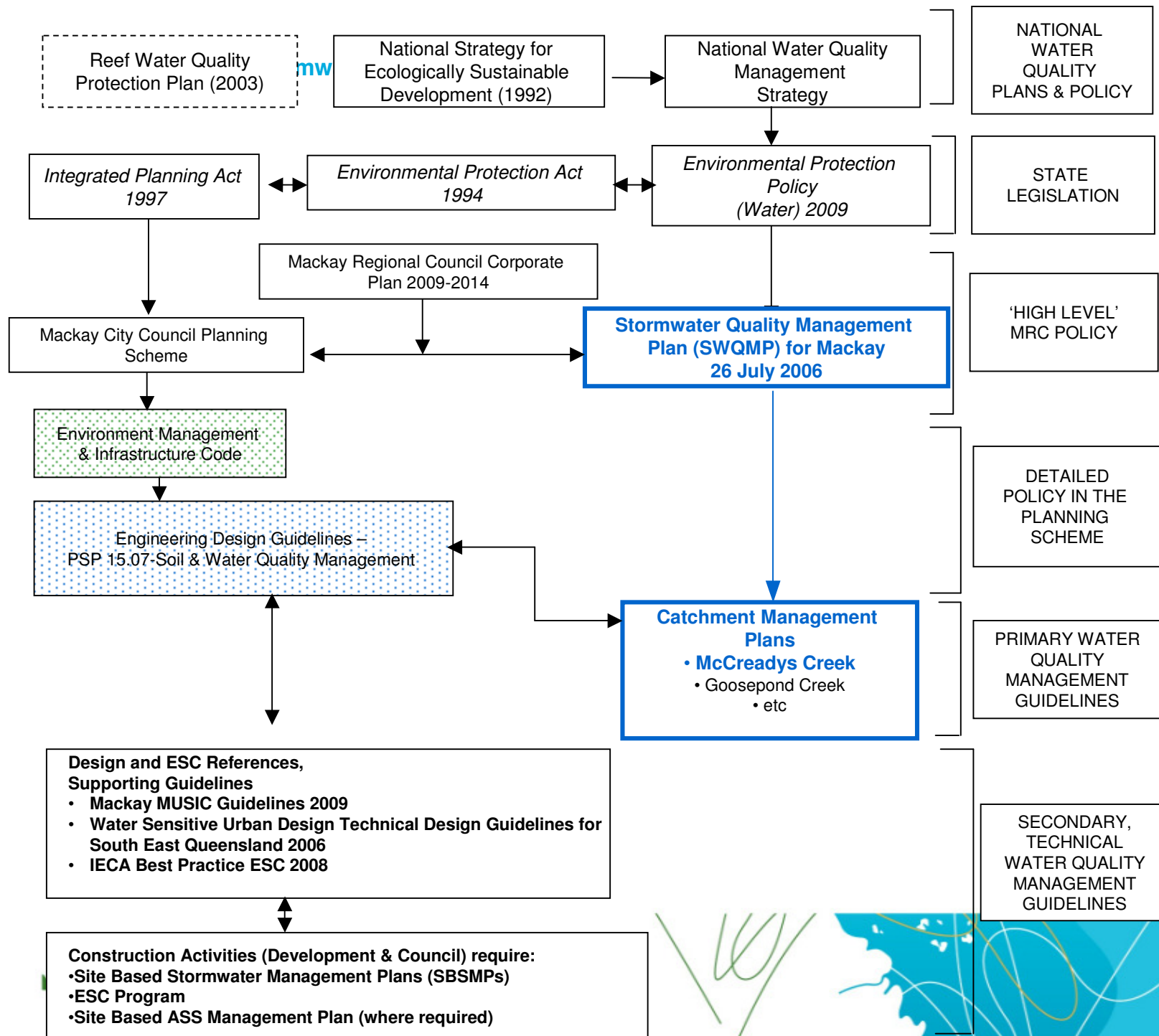
Urban Stormwater Management in Mackay

**Robyn Birkett, Waterways & Open Space,
Strategic Planning**

28 October 2009

Stormwater Quality Management Plan (2004)





Catchment Management Plans

- **McCreadys Creek CMP completed in 2004**
- **Goosepond Creek CMP prepared from 2007-2009**
- **On ground works being implemented in McCreadys Creek Catchment.**
- **Environment levy originally used to fund on ground works but was only \$100,000 per year. Difficult to cover design costs**
- **Large constructed wetland in an existing urban suburb (Andergrove) has been designed and land acquisition is currently underway. Cost is \$5 Million.**



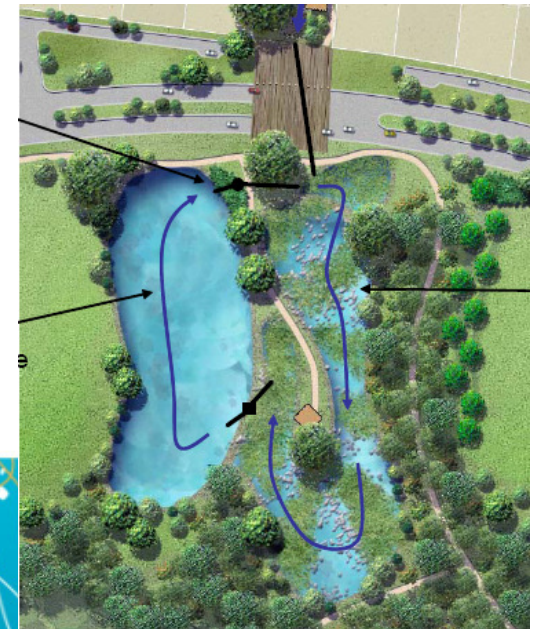
Training

- **MUSIC Guideline training – half day in June 2008**
- **WSUD Training in July 2008 using SEQ Water by Design Flyers, Course notes and trainers:**
 - **Fundamentals of Bioretention System Planning, Design, Construction and Establishment**
 - **Fundamentals of Constructed Wetland Planning, Design, Construction and Establishment**
 - **Cost per attendee was \$165 per day and Council provided 50% of the cost for the workshops (Total Cost was \$11,600 for the two days)**
- **Plan to present a 1-2 day ESC workshop in late 2009. Last significant ESC training in Mackay was in 2004.**

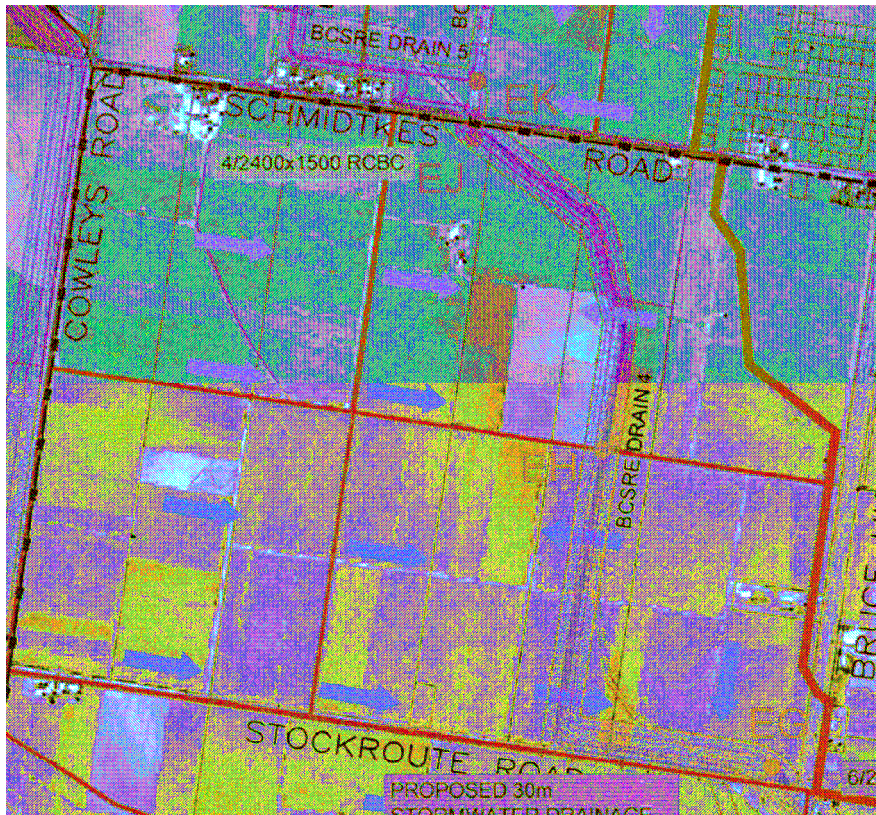


Other Projects since SWQMP

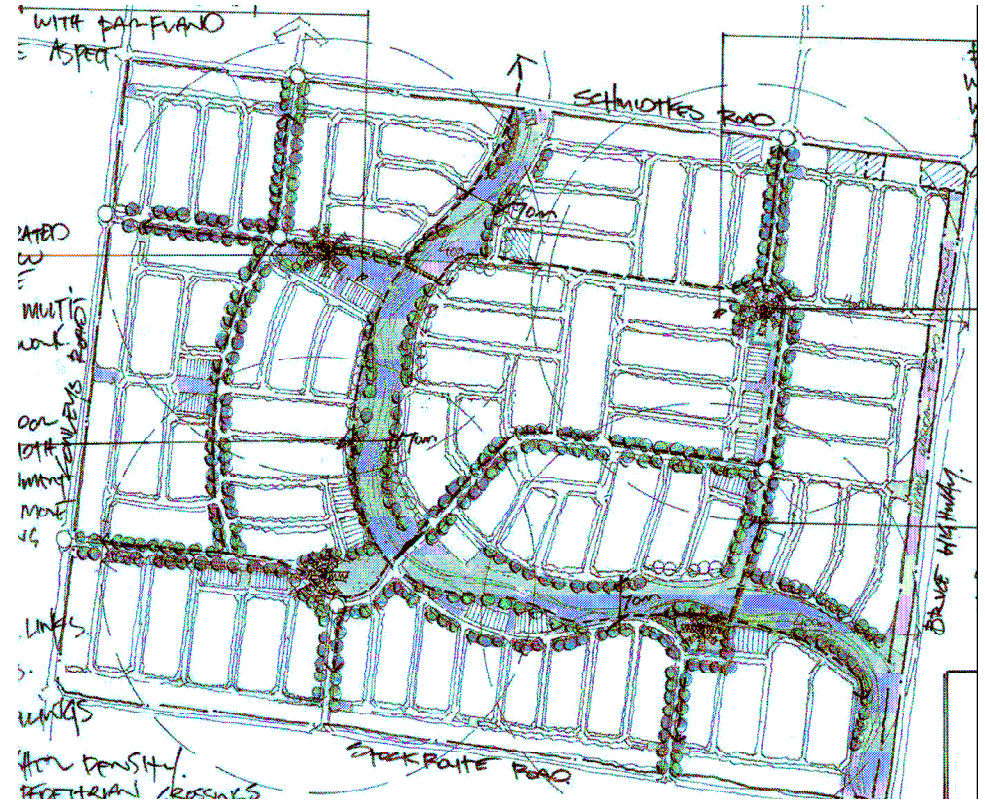
- Example Site Based Stormwater Management Plans for residential and industrial developments
- Incorporating Stormwater Quality into Stormwater Trunk Infrastructure Studies
- Constructed Lake Guideline
- MUSIC modeling Guidelines
- Waterway Health Monitoring Program – ambient & event
- Review of Stormwater Quality Objectives
- Review of Stormwater Quality Management Plan
- Review of Engineering Design Guidelines
- Review of Open Space Policy



Need to consider WSUD at the Concept Planning Stage



Traditional Approach



WSUD Approach



Load Reduction Objectives for Mackay

Stormwater Pollutant	Pollution Load Reduction Objective	
	Existing	Proposed
Total Suspended Solids (TSS)	80%	75%
Total Nitrogen (TN)	60%	60%
Total Phosphorus (TP)	45%	40%
Gross Pollutants	-	90%

**Source: Stormwater Quality Performance Curves & Stormwater Quality Objectives for Mackay, 2009*

- Development Engineering Note sent to development industry to update professionals with proposed changes.
- Full report available on Mackay Regional Council website (www.mackay.qld.gov.au)

