Integrated Catchment Management Planning for Moreton Bay Regional Council

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Presentation Overview

• Study Area
• Understanding Current and Future Pressures
• Setting Targets
• Assessing Management Scenarios
• Best Bang for Buck Solutions
• Key Challenges
• Key Learnings
Study Area

- Area ~ 200,000 ha
- Population 2016: 439,200
- Population 2031: 574,800
- 8 Sewage Treatment Plants
- Key waterways include Caboolture, Pine & Stanley Rivers
- Moreton Bay provides >$7.5 Billion / year
Understanding Current and Future Pressures

• Whole of catchment approach
• All elements of water cycle considered
• Quantify each element of water cycle to help set targets and measure performance
Setting Targets

- Use current conditions to benchmark whether catchment pollutant loads are acceptable
- Target “no net increase” in loads
- Use modelling framework to assess the impact of management decisions on receiving WQOs
Assessing Management Scenarios

• Modelling framework – tool for quantifying conditions and performance of management options
Best ‘Bang for Buck’ Solutions

Sustainable Load Target

- **No Net Increase Target**
- **EHMP Score C+**

**Solution 1**

- Treatment Cost ($/kg)
- Nitrogen Reduction (kg/yr)

- **Solution 2**

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Best ‘Bang for Buck’ Solutions - Sediment
Best ‘Bang for Buck’ Solutions - Phosphorus

- Stormwater Harvesting
- Rural BMP Horticulture
- WSUD Retrofit
- Recycled Water Agriculture
- WSUD SPP

TP Reduction (t/yr) vs. Treatment Cost NPV ($/kg.)

- No Net Increase Target
- EHMP C+ (Caboolture River)

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Key Challenges

- Multiple catchments to manage
- Significant future development in a number of catchments
- Environmentally significant receiving waters environment
- Responsibility doesn’t sit with one entity
Key Learnings

• Scale of projects
• Community buy-in is critical for the long term
• It doesn’t stop with the plan:
  • Vision
  • Education
  • Construction
  • Collaboration
  • Policy
Thank You - Questions?

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