

Tidal, non-tidal and freshwater constructed water bodies (CWBs)



Workshop – 22 July 2013
Lake Kawana Community Centre

Workshop Objectives:

- Detail the current management arrangements associated with CWBs
- Discuss the complexity and range of issues associated with CWBs
- An understanding of council's current planning policy approaches
- Site visits to examples of CWBs

Overview

- **Fresh**

- 78 systems (61 hectares)
- Shallow and deep freshwater lakes
- Brackish lakes
- Significant growth forecast, e.g. Caloundra South (70 hectares)

- **Tidal/Non-tidal**

- 6 artificial lakes, e.g. Parrearra, Pelican North, Mountain Creeks
- Significant growth forecast, e.g. Lake Kawana, Twin Waters

* Please note this does not include canal systems.

- **Management**

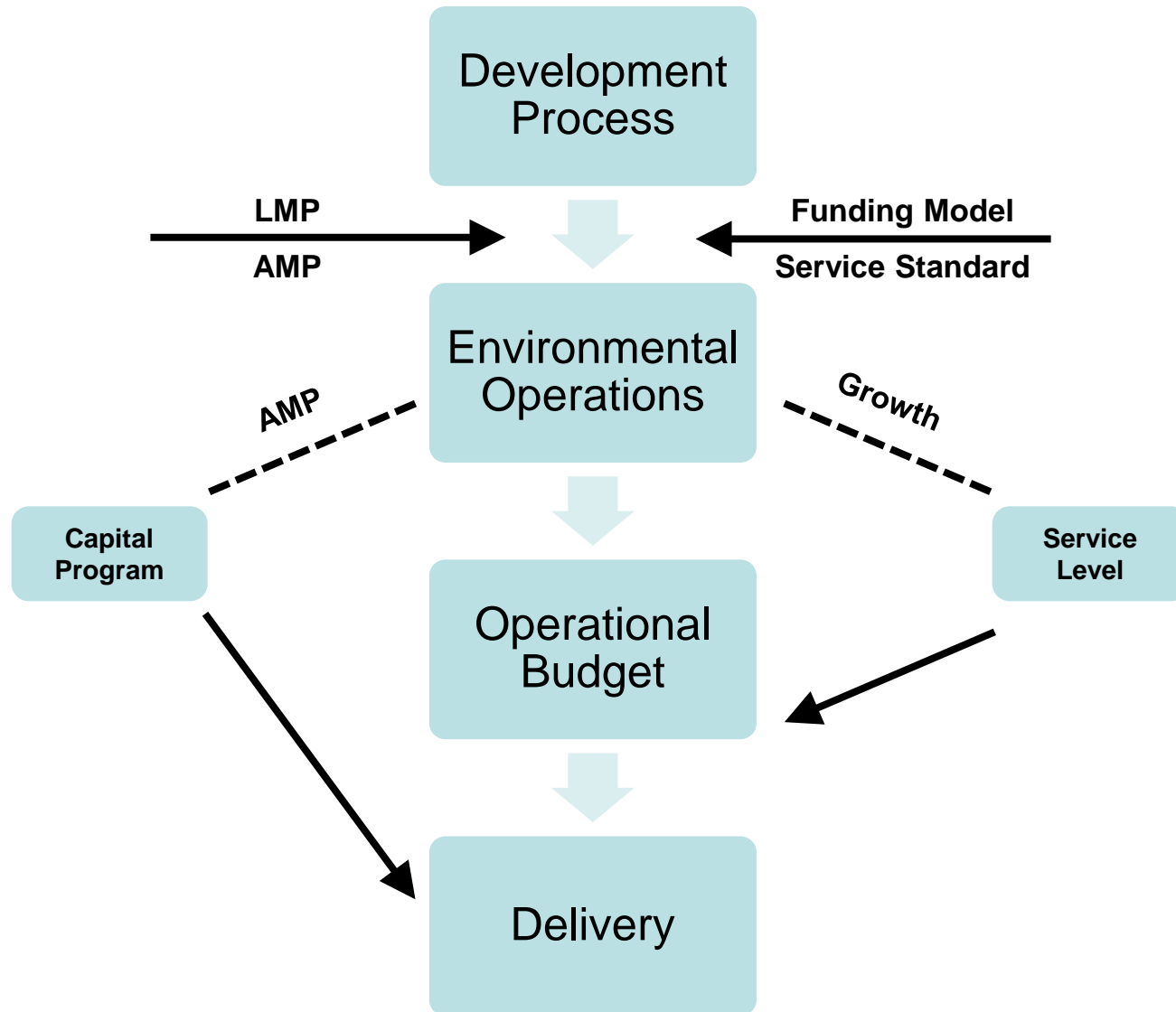


Infrastructure (council responsibility only)

Asset/Service	Quantity	Service Level
Revetment walls	7.7 km	Programmed
Scour Protection	30 km	Programmed
Locks & weirs	3	As per individual AMP's
Tidal control structures	3	Programmed
Boat Ramps	2	Programmed
Jetties & pontoons	5	Programmed
Rock walls	4.1 km	Programmed
Aquatic Vegetation	>350 t	*Low – very high
Litter Management	>9 t	*Low – very high

* dependent on lake assessment in terms of legislative, risk, environment & community

Process



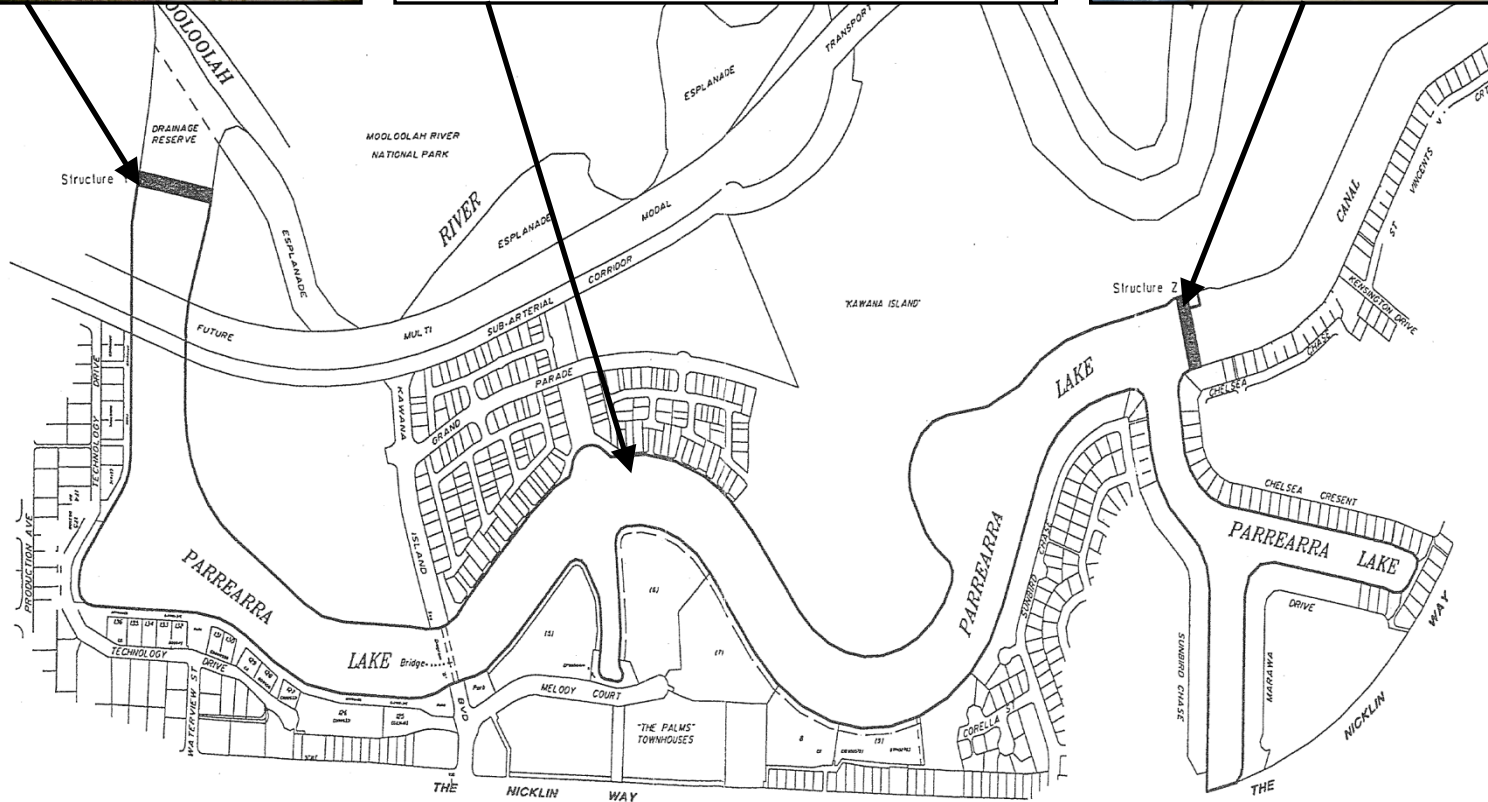
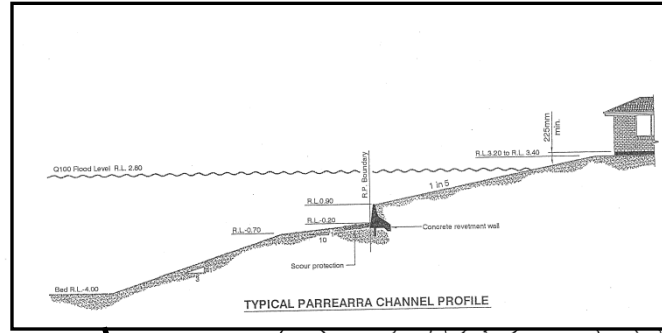
Site Visit Asset Scope

Lake System	Current Owner	Management Legislation	Lake Management Plan	Fresh or Tidal/ non Tidal	Infrastructure Assets	Funding Scheme	Ocean Access	Function
Parrearra Lake	State T/Ship (sport & rec)	Land Act	In place	Non	Lock Weirs Penstock Revetments	Rates & revenue*	Yes	Flood conveyance & recreation
Twin Waters	Developer (to be freehold under trust)	Land Title Act	Draft	Non	Weir Boat Ramp Rock Walls	Rates & revenue*	No	Flood conveyance & recreation
Sunshine Cove	Developer (to be T/Ship for drainage)	Land Act	Draft	Non	Weir Sal Exchange	Sinking fund	No	Flood conveyance & recreation
Pelican Waters Northern Lake #	Council (freehold)	Local Government Act	In place	Non	Weir Lock Revetments Sal Exchange	Sinking fund & revenue*	Yes	Flood conveyance & recreation
Lake Kawana	Developer (to be freehold under trust)	Land Title Act	In place	Non	Weir Revetments Sal Exchange Rock Walls	Rates & revenue*	No	Flood conveyance & recreation

- Revenue can be access cards, lease fees associated with jetties and pontoons.

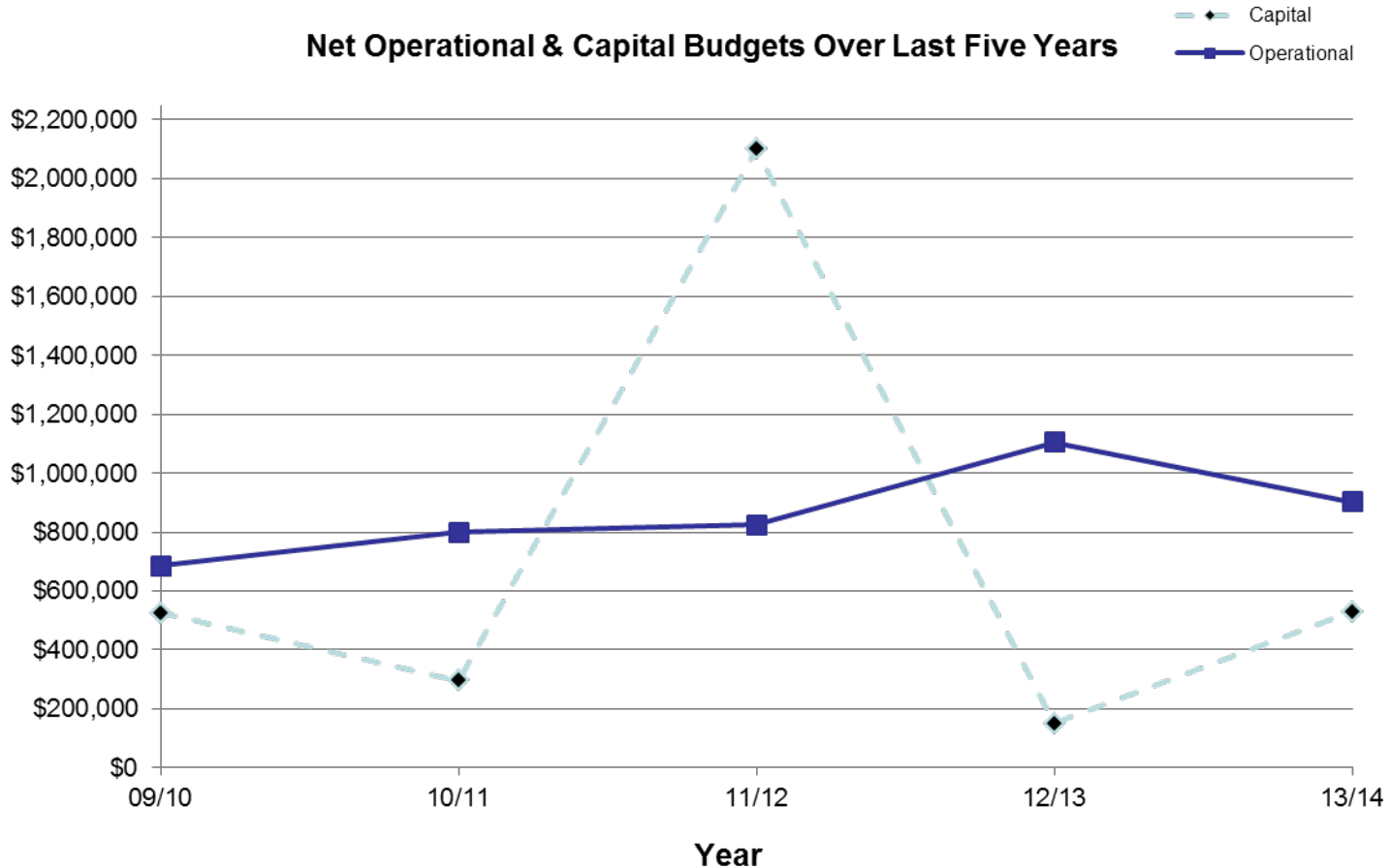
Lock and weir transferred to council; pontoon and jetty leases managed by council; cards, lake and salinity exchange still with developer.

How it Works



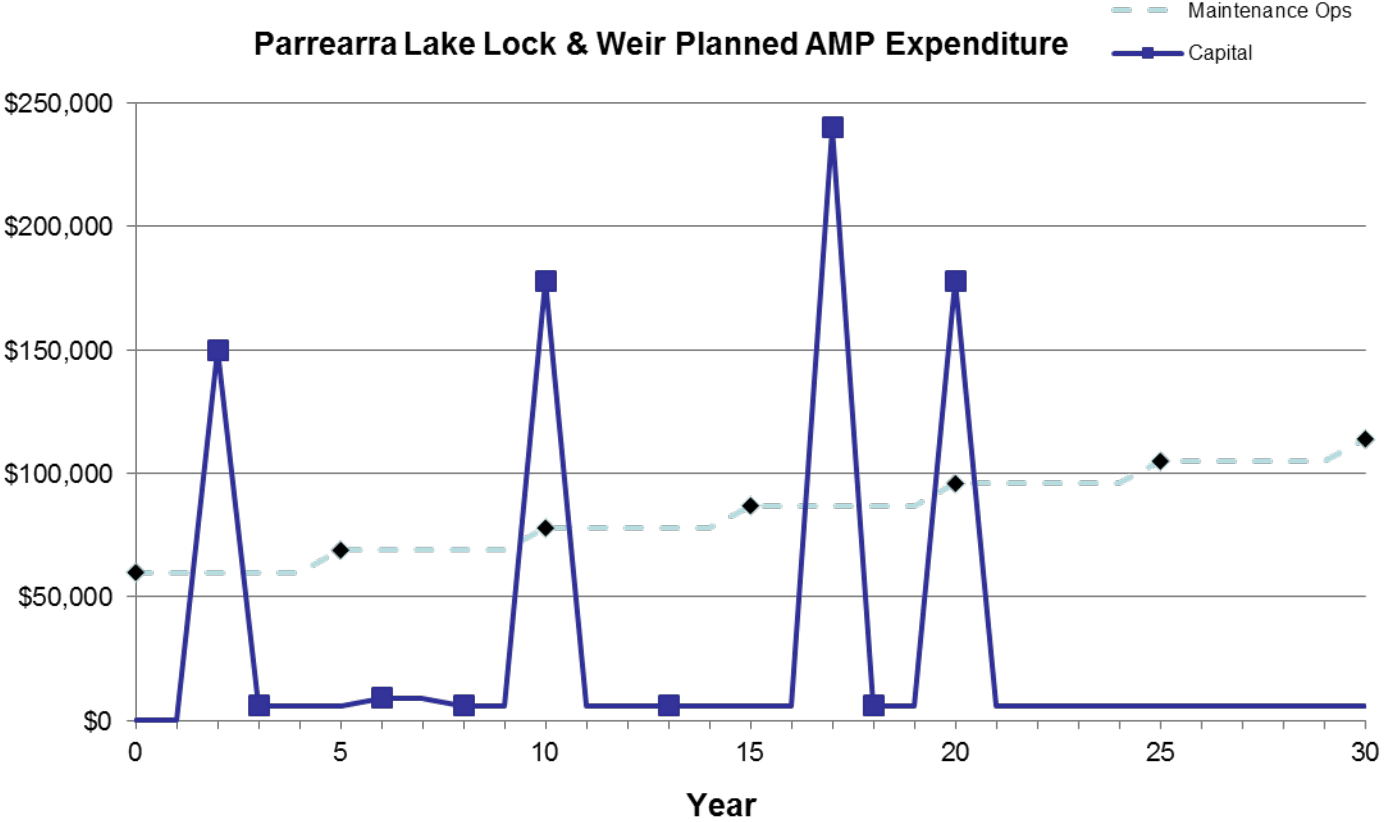
CWB Budget Over Last Five Years

Net Operational & Capital Budgets Over Last Five Years



Doesn't include SSPs or revenue from jetty/pontoon leases

Asset Expenditure Example



Pontoon/Waterway Leases

- Council currently manages pontoon/waterway lease areas within Parrearra Lake and Pelican Waters Northern Lake. Lakes at Twin Waters and Lake Kawana, Birtinya are proposed to transfer to Council.
- Lease areas in each lake are different, e.g. Parrearra and Pelican Waters Northern Lake systems permit larger marine structures to cater for ocean going craft; Twin Waters Lake permits smaller structures for kayaks and tinnies.
- Annual lease fees are:
 - calculated on a fair market rental value for the lease area
 - undertaken by an independent, qualified and registered valuer
 - dependent on the characteristics of each lake, and
 - in accordance with lease terms and conditions.
- Current lease fees:
 - Lease fees are incidental to funding for use or maintenance obligations relating to the surrounding land or lock & weir structures. However, 'net' revenue from annual lease fees may be applied to these maintenance obligations.

Lake	Number of Leases	Anticipated Revenue 2013/2014
Parrearra Lake	100 lease structures	Approx. \$50,700
Pelican Waters Northern Lake	106 vacant lease sites 62 lease structures	Nil Approx. \$30,000

Planning & Development - History

- **Planning Approvals**
 - Approvals - over many decades through varying development approval systems – Local Govt. Act, Land Act, Planning & Environment Act, IPA, SPA.
- **Infrastructure & life cycle costs**
 - Historically, planning & legislation frameworks often dealt with lakes & water bodies without detailed consideration of infrastructure maintenance, replacement & other life cycle implications.
- **Conditioning, agreements & funding**
 - Mechanisms ‘evolved’ over time - often reflected scale of project, engineering/mechanics, intended function, legal framework, tenure, ownership & past experiences.

Current Planning Policy Approaches

- **Current planning policies**
 - Draft Sunshine Coast Planning Scheme – contains a stormwater management code which addresses constructed water bodies:
 - CWBs are avoided as public assets unless there is an overriding need in the public interest
 - CWBs are designed, constructed and established to:
 - minimise maintenance and decommissioning costs
 - minimise the requirement for specialised maintenance equipment, and
 - are provided with an on-going funding source.
- **Determination of options available to council**
 - typical funding arrangements are considered during the initial planning assessment phase.
 - interdepartmental collaboration occurs with consideration of whole of life cycle costs and concentration on council capacity to sustainably maintain the water body (triple bottom line).

Current Development Projects in Pipeline

- **Caloundra South (EDQ - State)**
 - In accordance with EDQ (State) development approvals - more than 20 water bodies (about 70ha) of varying form & function.
- **Maroochydore Central Precinct**
 - 8 ha of lake for flood mitigation and distributed to achieve maximum amenity.
- **Pelican Waters – Proposed Southern Lake Precinct**
 - Proposed lake system (lock & weir) within a mixed use development precinct with direct waterfront allotments
 - Preliminary approvals and Infrastructure Agreement in place

Challenges/Opportunities/Next Steps

- Growth
- Cost refinements for freshwater CWBs assets
- Recognition of all CWBs in asset planning
- Development Process
- Legislation
- Funding Arrangements
- Ongoing condition assessments for lake profiles