



# Pacific Asset Management

How Cultural Values add to providing  
Optimal Service at Reasonable Price



# Structure of Presentation

- For each section the format will be
  - Presentation 15 minutes
  - Group discussion 5-10 minutes
  - Report back 5-10 minutes
- Topics
  - Appropriate Asset Management
  - Levels of Service
  - Managing Demand
  - Managing the Asset Lifecycle
  - Challenges to think about

# Topics of Session

- What do you want to achieve
- Where are your efforts best utilised
- What are the whole of life costs
- What are the benefits



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# Asset Management Introduction

## Introduction



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## What is the Goal of Asset Management

- Managing your assets to achieve maximum value and benefits, reducing risk and to provide satisfactory Levels of Service to the Community in a responsible manner





# What is Asset Management

- Asset Management is applications of Techniques to achieve the Asset Management goal
- A Plan on what you want to achieve
  - AMP's evolve as the organisation asset management becomes better.
- Know the assets you want to Manage
  - Require enough information
  - Unique name
  - Basic information (location, age, value, condition, risk)
  - We don't need to know everything (draw a line in the sand)
  - Data needs to be maintained – resources, cost

# What are Assets

- Anything in order to achieve its function:
  - Financial assets (investments, saving operations costs)
  - Movable assets (plant and equipment)
  - Fixed Assets (pipes, pumps)
  - Software and information (written information included)
  - Knowledge and expertise (developed within the organisation)
  - The People (staff knowledge)
  - The customers

## How will AM help me?

- Financial and Management Benefits
- Legislative Benefits
  - Government
  - Funding organisations
- What are your drivers?
- Planning Asset Management
  - Appropriate amount of money spent
  - Correct Level of Service provided
  - Right time period



# Levels of Asset Management

What is expected

- Understanding your internal environment



## Structure Within NZ Councils

- Waitaki District Council examples
- What assets the Managers in charge of (i.e. water, wastewater, not gas electricity)
- Staff deployed to management assets

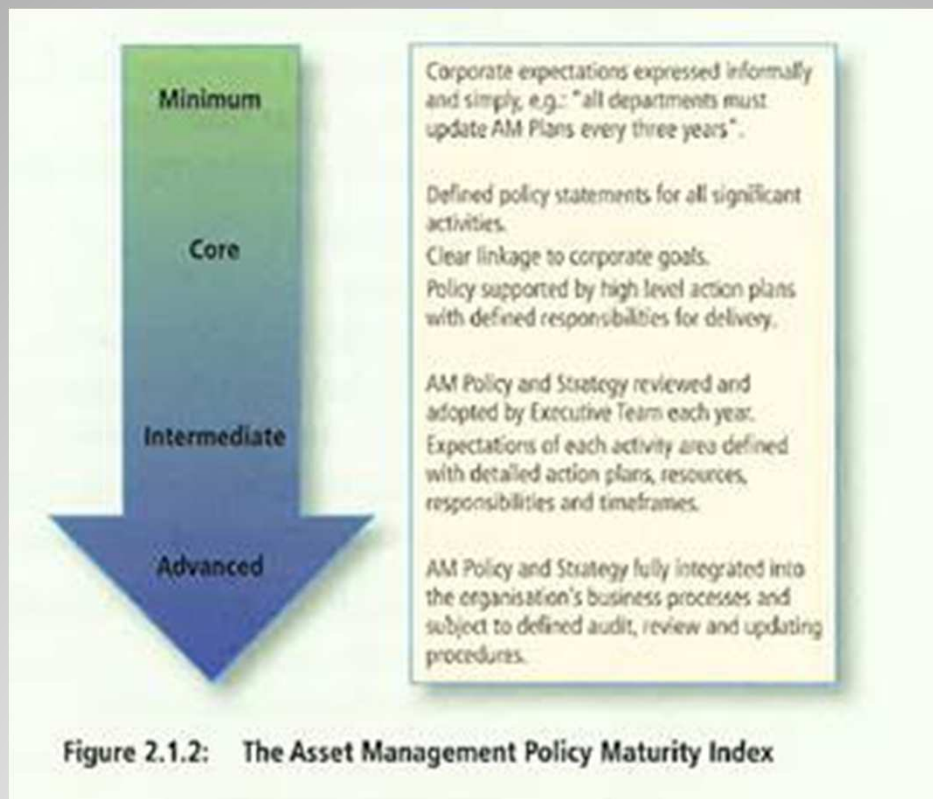


## NZ Appropriate AM level

- Comparing NZ authorities, Auckland versus Waitaki
- Population basis
- Different Communities have different requirements
- Minimum legal requirements



# NZ Appropriate AM level



## Asset Management in Context

- Resourcing, develop a new measurement as currency not the same. e.g. km/FTE



## Pacific Countries

- Resourcing Example



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## What do you want to achieve

- With the resources you have available what can you afford to achieve? (80/20 rule)
- Bearing in mind resourcing such as:
  - Internal staff
  - Aid agencies
  - External Consultants Local and International
  - Partnering with other local Pacific countries

## Breakout session

- What do you want to achieve
- Discuss your resourcing (Money, staff, resources available)
- What are your drivers



## Takeaways

- One size does not fit all
- What is best for me
- Be good Stewards
- Appropriate Practice
- Sustainable issues & resources



## Your Customers are:

- Key Stakeholders (significant groups, Board Directors)
- Funding Partners
- Residential customers Commercial users
- Communities not yet serviced
- Future users

**Different groups want different things**

## Levels of Service

- What do you intend to deliver to the customers?
- Not necessarily NZ/AUS Levels of Service
- What service do the customers want?
- More people serviced?
- Less environmental effect?
- What is the need?
- How do you measure performance?

## Levels of Service Difference

- Resorts versus Villages
- Towns & Cities versus village and rural communities





# Community Consultation- Why?

What is expected

- Community Buy-in
- Ensures focus on Community needs and wants
- Understanding of Customer wiliness to pay
- Demonstrates good stewardship of Community funds
- Long term sustainability with Community support

## Community Consultation- How?

- What does Community buy-in look like in your culture?
  - Is it discussion over a community meal/ shared lunch?
  - Is it after church discussions?
  - What else?



# Community Values

- What does your community value
- Traditionally  
**Value = Benefits – Costs**
- How does your community develop this

## Breakout session- LOS

- Who is your Customer?
- What is the need of your Community?
- How can you get Community buy-in?
- How can you understand what the community values



## Takeaway

- Know what is required?
- Know why is it required?
- Community Buy-in, Important?



# Managing Demand

- What influences Wastewater demand?
  - Population changes expected?
  - Changing population age expected?
  - Changes in Lifestyle?
  - Changes in appliances?
  - Visitors (resorts)





## Demand

- Environmental changes
- Drivers of changes in water demand
- Water Treatment changes
- Grey-water reuse
- Predicting demand changes
  - Changes next 10 years
  - 10 to 50 years
- Responses to demand
  - On demand water or restricted/ tank storage supply

## Notes from Benchmarking 2011

- *"Water production on a per capita basis exceeds the typical design unit demand used for infrastructure sizing throughout the Pacific"*
- *"At the macro-level, the region lacks the benefit of having access to water demand and supply data and statistics"*
- What does this mean?
  - Upgrades, as resources get exhausted



## Breakout session

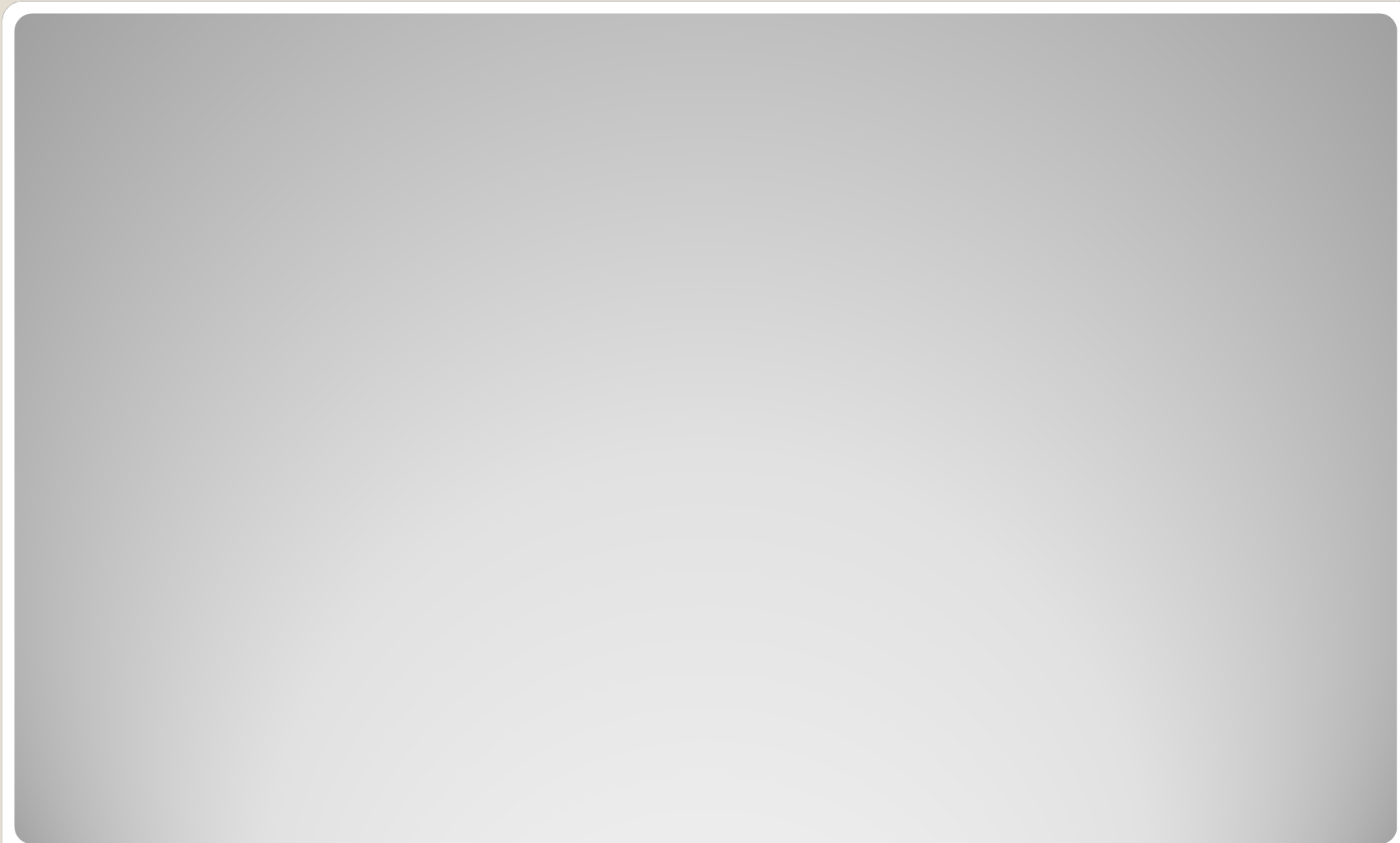
- Is Demand Management important to you?
- How can you proactively manage demand in a:
  - 10 year period
  - 50 year period
- What responses are required to demand changes
  - Short term
  - Long term

## Takeaway

- Predicting demand is important for long term planning
- Changes in demand are likely
- Know how demand management affects assets
- Know how to respond to demand changes
  - Short term
  - Long term



# Lifecycle Management



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## Asset Lifecycle

- Asset Creation
- Asset Operations and Maintenance
- Asset Renewal or Replacement
- Asset Disposal

**The total cost of an asset from design, construction, operation, maintenance and disposal**



## What are the Drivers?

- Funding NZ/AUS/ADB funds
  - Asset creation
  - Asset operations and maintenance
  - Asset renewal/disposal
- Questions:
  - What is the reason for asset creation?
  - Does the Community want it?
  - Long Term Community commitment to maintain it?
  - What are the costs in the long run?
  - Are you prepared to pay these costs

# Asset Lifecycle

- Traditionally we assume the assets need to last forever, so we maintain in that way
- Do assets need to be maintained in prime condition forever?
- Do you need the Asset forever
- What about new technology?
- Are current assets appropriate for Community
  - Levels of Service
  - Demand

## Conditional Funding

- How to make funding work in the long term
- Long term planning, strategic planning
- What's the best way to get access to funds?
- What does sustainable funding look like?

# Breakout Session- Lifecycle

- What are your drivers?
- Do you look at assets from Creation to Operational to disposal?
- What does sustainable funding look like for you?
- How do you plan strategically?

# Takeaways

- Understanding the consequence and cost to have an asset, even if its “free” in the creation stage
- Managing Assets through lifecycle
- 60-70% of long-term cost are locked in at asset creation
  - Design
  - Operating costs
  - Quality of construction
  - High or low maintenance asset

# Challenges to Think About

**CHALLENGES  
AHEAD**



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# Operations & Maintenance

- Installing new plant can cause a **cultural change**
- Installing treatment plants in Communities have a consequence..... It changes behaviours in the Community.....
- People stop boiling water..... if the plant is not maintained then the treatment facility can make people more sick than before.....
- Changing behaviours

# NZ Model for Lifecycle Costs

- In NZ
  - 50% of our assets were funded by subsidy on creation
  - 50% loan funded, low interest funds
  - Maintenance funded by rates
  - Renewal funded by rates/loans
  - Operations funded by rates





## Pacific Considerations- Lifecycle costs

- Pacific could adopt NZ model for maintenance, [or](#)
- Revenue creation model?
  - Targeted charges (eg. tourist tax)
  - Indirect charges on users [Or](#)
- Where are revenue losses in system?
- How to set up sustainable funding

# Appropriate Level of AM for You

- Solutions must be contextualised for you
- Specific to each Utility Authority, each community & each nation
- Local knowledge imperative

## AM application of Techniques to get right product at right price

- How do we meet customers needs in the most cost effective and sustainable manner?
- Where do we want to be in the future?
- What do we own and manage?
- Where are we now?
- How are we going to get there?
- Its ok not to be the same as your neighbour



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