IMPLEMENTING SUSTAINABLE WATER MANAGEMENT IN NORTH SHORE CITY

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To achieve sustainability across all 4 wellbeing's, integration is one of the most important requirements.

• Protect and enhance natural environment
• Protect and enhance public health
• Being economically sustainable
• Now and future: responding to growth
• Provide multiple benefits across multiple output areas (integration)
Growth a threat?

• **Threat**
  - More demand → more capacity
  - Unpredictable
    - How much
    - When
    - Where (now everywhere)
  - Plan for worst case? → costly!

• **Opportunity**
  - Every change is an opportunity to do better
  - Existing water management practices are out of date and cause significant effects (flooding / streams / beaches / pollution)

• **Solution**
  - Cap/Release = more efficient
  - Better rules

• **Conditional upon**
  - Taking these opportunities
  - Changes to legal framework
  - Integration at all stages
    - planning → construction
Integration

- Can’t engineer your way out
- All starts with land-use
  - Best point to meet objectives
  - Timing and outcome
- What’s in it for the community?
- Best bang for the buck
- From planning to operation
Lucas Creek stream restoration
Lucas Creek stream restoration

• Worth protecting but deteriorating fast
  ➢ Changes to District Plan
• Work starts this financial year
• Outcomes
  ➢ Restored stream
    • Riparian margins
    • Erosion protection
    • Stream bed
  ➢ Amenity – access
  ➢ Walking cycling
• Integration
  ➢ Land use (close to Albany Centre
  ➢ Parks (large reserve)
  ➢ Transport (connectivity for walking / cycling)
Albany centre

• **District Plan changes**
  - Being implemented now
  - Developer walking the talk

• **Civic Crescent**
  - Includes bio-retention
  - Council walking the talk
  - Rest of ring-road to follow

• **Integration**
  - Stormwater
  - Legal framework
  - Public space
  - Consenting
  - Transport
  - Parks
Use of Community Based Social Marketing when restoring streams in private properties

- **Traditional approach will not work**
  - Engineering
  - Consultations
    - The community didn’t think what we thought they were thinking…..

- **Need to find barriers and remove these to successfully work with community**

- **Applicable in other areas**
  - Such as transport
Long Bay Structure Plan

- Lots to Protect
  - Landform
  - Stream
  - Marine Reserve

- Community not happy with other developments
  - Albany, etc
  - Significant impacts
  - So, no more of the same
Catchment plan and Structure Plan were simultaneously developed

- **Stormwater**
  - discharges and
  - stream management
- **Wastewater and**
- **Water supply**
- **Land-use (zoning)**
- **Heritage**
- **Landform**
- **Transport**
- **Reserves**
Court ruled: Low Impact Design and Stormwater Treatment Train accepted

- **LID:**
  - Minimise land modification in sensitive areas
  - Protection of headwaters
  - Fit for purpose stormwater management

- **Treatment Train:**
  - Prevent & on-site treatment & wetlands
So, was the Long Bay Structure Plan process successful?

**YES**
- NSCC got most of what it wanted
- Most of the rationale was accepted
  - Land modification
  - Sustainable stormwater management
    - headwaters
    - no reward for poor land management

**NO**
- Process took many years
- Any many millions of dollars
  - Stormwater Environment court process only was at least $1,500,000
Current legal framework is not sustainable

- **Money talks**
  - Councils cannot afford the process
- **Effects based**
  - In theory great
  - In practice very difficult: lengthy arguments
  - RMA is not working: effects are destructive
- **Existing (ab)use rights**
  - Will paralyse improvement in browns field redevelopment
- **Danger**
  - RMA simplification: business 1st, Community 2nd and Environment 3rd?
Institutional problems: we’re not prepared to pay for what we promise

Costs per annum;
council services and other descretionary household items

<table>
<thead>
<tr>
<th>Item</th>
<th>Annual Cost</th>
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</thead>
<tbody>
<tr>
<td>Average running costs medium sized petrol car (AA-website)</td>
<td>$2,400</td>
</tr>
<tr>
<td>Fuel costs for a yr 2000 Toyota Corolla (<a href="http://www.rightcar.govt.nz">www.rightcar.govt.nz</a>)</td>
<td>$2,400</td>
</tr>
<tr>
<td>My annual electricity bill</td>
<td>$2,400</td>
</tr>
<tr>
<td>MY annual phone and internet bill</td>
<td>$1,200</td>
</tr>
<tr>
<td>Sky membership (start up package)</td>
<td>$1,200</td>
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<tr>
<td>My gym membership</td>
<td>$1,200</td>
</tr>
<tr>
<td>1 new computer every 3 yrs at $1500</td>
<td>$1,200</td>
</tr>
<tr>
<td>4 movies per year with 2 people</td>
<td>$1,200</td>
</tr>
<tr>
<td>NSCC: Transport</td>
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</tr>
<tr>
<td>NSCC: Environmental management</td>
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<tr>
<td>NSCC: Water Supply</td>
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<td>NSCC: Stormwater</td>
<td>$1,200</td>
</tr>
<tr>
<td>NSCC: Leisure</td>
<td>$1,200</td>
</tr>
</tbody>
</table>

Should we market ourselves better?

All about leadership
And
Showing good examples

FIRST World country for THIRD World Rates

8800
Organisational Barriers

• **Observations**
  - Council not leading by example
  - Risk adverse
  - Insufficient Leadership
  - Planning → Implementation disconnect
  - Insufficient knowledge across organisation
  - Insufficient knowledge in industry
  - Lack of proactive relationships between council and industry
  - Enabling legal framework is always behind

• **My conclusion**
  - There is always a reason not to do / not to change
  - It needs leadership (or a catastrophe) to trigger big changes
Sustainability and Integration go Hand-in-Hand

• NSCC has been reasonably successful in sustainable water management
  ➢ See examples
  ➢ Long way to go

• All these examples show
  ➢ Multi disciplinary approach
  ➢ Cooperation across multiple council output areas

• Most business is done through informal contacts

• Integration is essential to achieve sustainable outcomes
  ➢ All of Council & industry & community
Vertically integrated companies (silo’s) such as one big Auckland Water Company might do their own business better, but integration / achieving truly sustainable outcomes will become a lot harder … … if not impossible.

The only things we need:
- Regional decisive powers (in case of regional significant issues)
- Critical Mass (NSCC proven to be able to deliver)