

# AUCKLAND'S ON-SITE STORMWATER MANAGEMENT PROGRAMME: THE PROCESS OF CHANGE MANAGEMENT

*Greg Paterson, Manager Stormwater, Auckland City Council*  
*Murray Menzies, Water Resources Consulting Group Ltd, Auckland*

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## ABSTRACT

The paper documents the steps and processes applied in developing Auckland City's on-site stormwater management programme. Key aspects of the design of the programme were to get, prior to its external implementation, political buy-in at the outset and to nurture the internal "change management" process with City staff. .

The change management process broadly follows the "toolkit" set out for the City (Forum, 1997). In summary, the desired outcomes cover: people and management processes are aligned and focused; processes reliably deliver what is expected; and people are fully competent and continuously learning. Elements of the change management process applied which are described in the paper include:

- Recognising the need for change to match the agreed growth management strategy objectives
- Political commitment and leadership
- Building the foundation
- Educating and involving staff
- Facilitating the decision-making process
- The need for a consistent approach
- Technical and legal reviews
- Raising public awareness
- Staff and external training
- Implementation of the Manuals

The paper documents the rationale applied in facilitating the programme, both within the City and with stakeholders. Comments are given on the experience and the lessons, both positive and negative.

**KEYWORDS:** stormwater management, change management, on-site detention, education, briefings, buy-in, overseas precedents

## 1 BACKGROUND

Auckland City lies on the isthmus area between the Waitemata and Manukau Harbours. Basalt flows give rise to pervious soils over about one third of the City's area, particularly in the south, and typically enable the disposal of stormwater through private soakage systems. Elsewhere, soils are clays of the Waitemata group, with low permeability. In these areas, storm runoff is captured by the City's stormwater system which comprises some 1,300 km of pipes and 21.5 km of public watercourses. As at 1999, the City estimated that it had a backlog of stormwater capital works costing some \$190 million, with around 1,300 properties assessed at risk from flooding.

The City's present population is approximately 390,000. Growth, averaging 1.6% pa over the past decade, has traditionally been managed by expanding the size of the urban areas in the region. The on-site stormwater management (OSM) programme arises out of Auckland City's response to meeting this growth. In summary, the steps taken have covered:

- Under the auspices of a Regional Growth Forum (a political process), Auckland City agreed to accommodate its “share” of the extra population, amounting to an extra 220,000 people over the next 50 years (ARC, 1999)
- Due to the absence of “greenfield” opportunities, it was clear that this requirement would have to be met by urban intensification; Auckland City then applied a community consultation process to resolve the following questions (this process and the findings are documented in “Growing Our City Through Livable Communities 2050 Strategy” – Auckland City, 2000):
  - intensification to be uncontrolled, or limited to designated areas ?
  - intensification to be “up” (ie high-rise development) or “out” (ie low-rise buildings, but covering a higher proportion of the lot/site that has been allowed previously) ?
- Based on the conclusions reached, namely to go “out” and only in designated “strategic growth management areas”, the next imperative was to identify the corresponding infrastructural impediments; from this:
  - the ensuing technical studies concluded that stormwater was the most problematic issue
  - this led to the commissioning of an “Alternative Stormwater Management Techniques Study” (WRCG, 2001) which concluded that there were a range of feasible on-site stormwater management measures that could be applied to control runoff to levels within the capacity of the existing trunk stormwater system and to meet water quality objectives; it also addressed a range of potential charging mechanisms for stormwater
- The results of this study were then debated at a Joint City Works/Planning Committee Workshop in June 2001; from this the following decisions were taken:
  - implement the on-site stormwater management (OSM) programme, building on WRCG’s report, and in doing so, bring the necessary skills and resources to bear ; hence the need for change management
  - in parallel, the City should demonstrate its leadership and commitment by incorporating OSM devices in upcoming new City buildings

In simple terms, the decision to grow “out” requires relaxation of the current 60% maximum coverage requirements in the District Plan. Long-term solutions are required because asset management and catchment management studies utilise the District Plan coverage to size infrastructure that has a life expectancy of at least 80 years. The conclusion of the aforementioned feasibility study was therefore that, where site impervious surface coverage exceeds 60%, the developer/owner would be required to install on-site stormwater management devices (OSM’s). OSM devices are purpose-constructed systems designed for either detention or retention of stormwater runoff at or near their source; in essence, they store excess runoff and release it later and at a slower rate. Examples are rainwater tanks (incorporating an air space for temporary stormwater detention), rain gardens and roof gardens.

The OSM programme is being implemented according to the provisions of an “OSM Manual” (Auckland City, 2003a). This provides design professionals with specific requirements for reducing the impacts of stormwater runoff (water quantity) and pollution (water quality). In contrast to a “text book” oriented approach, the Manual incorporates simple design charts for each type of OSM device, along with standardised design details. Allied material sets out implementation details, including the submittals regime, operation and maintenance provisions, compliance monitoring requirements, etc. A sub-set of the programme is an updated manual covering soakage systems (Auckland City, 2003b).

## **2 THE CHANGE MANAGEMENT IMPERATIVE**

Auckland City takes pride in its commitment to applying innovation in its utility planning functions. To ensure that the potential benefits are fully realised, implementation of the OSM programme has paid close attention to integrating a “change management” programme with the technical and administrative requirements. The change management process broadly follows the “toolkit” set out for the City (Forum, 1997).

Figure 1 illustrates the key features of the change management process. Of particular note are the needs to “build the foundation” and “enroll a critical mass of stakeholders”.

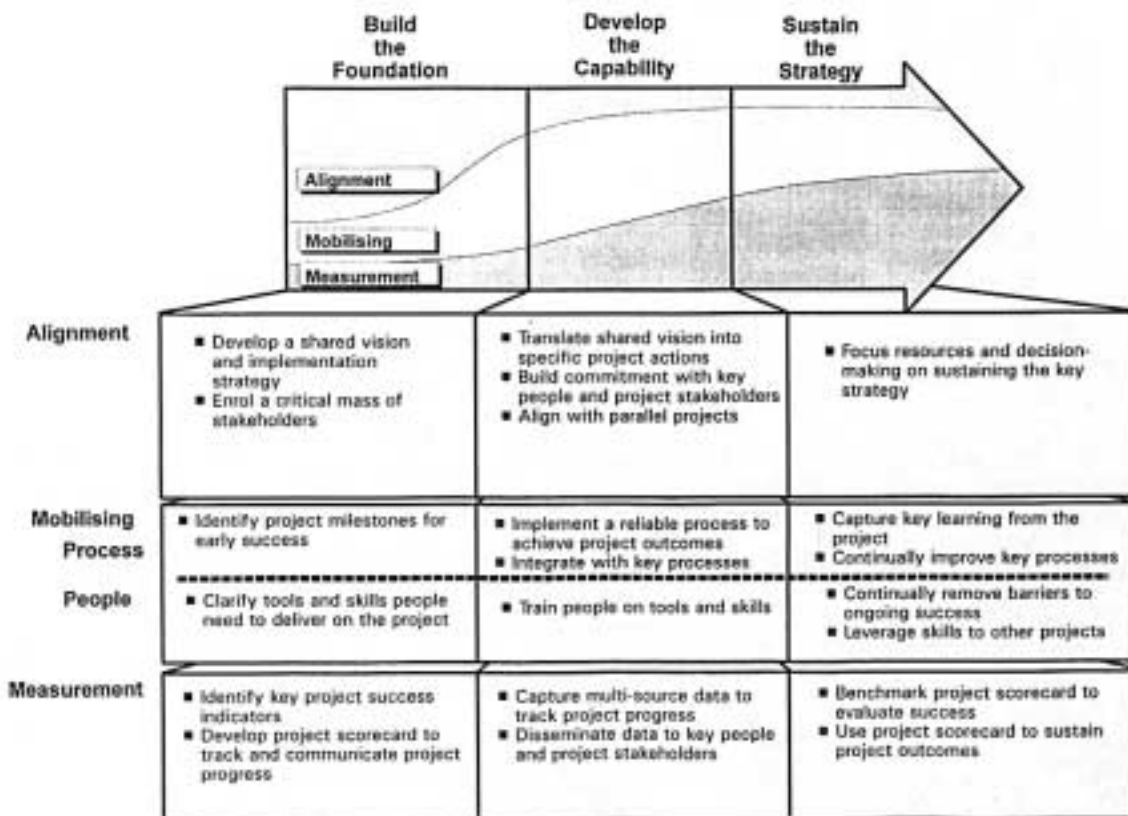
In summary, the desired outcomes are:

- People and management processes are aligned and focused
- Processes reliably deliver what is expected
- People are fully competent and continuously learning

In parallel, it was seen as imperative that the following relevant key outcomes of the Regional Growth Strategy (ARC, 1999) should be met by the OSM programme:

- Water quality and coastal environment: as a minimum, maintained, or ideally enhanced
- Use of resources: more sustainable practices applied
- Business opportunity: improved
- Urban amenity: higher standards met
- Housing choice/affordability: improved
- Physical and social infrastructure: provided and maintained (and capacity for meeting growth optimized)

**Figure 1: Key Features of the Change Management Process**



Against this background, overseas precedents were researched for implementing OSM-type programmes. Key examples identified were as follows (note that, in developing Auckland City’s OSM programme, Mr Menzies visited each of the listed organizations):

- City of Portland, Oregon, USA – refer WRCG, 2001 for documentation (note that contact was maintained with Portland personnel throughout, as a “sounding board” as ideas developed for Auckland’s OSM programme)
- City of Calgary, Alberta, Canada – refer WRCG, 2001 for documentation

- Upper Paramatta Catchment River Trust, NSW, Australia (UPRCT, 1999)

A further notable precedent was the stormwater management component of a training programme by a collective of seven local councils in New South Wales, the Lower Hunter & Central Coast Regional Environmental Management Strategy (“LHCCREMS” - Laing, 2001); along with Mr Michael McQuillan of Auckland City, Mr Menzies participated in a LHCCREMS change management workshop in November 2001.

From this research, among the main features built into the development and implementation of the OSM programme were:

- Building a firm technical and administrative foundation to the OSM programme, with a strong focus on the end-user
- Community/stakeholder consultation: it is noted that this process was initiated in the feasibility study (WRCG, 2001) through meetings with the Auckland City Community Development Reference Group, developers and consultants (including engineers and landscape architects)
- Workshops/briefings with Auckland City politicians and staff, designed to facilitate awareness of and buy-into the OSM programme (and in the process change any entrenched attitudes or “roadblocks” to the programme)
- “Championing” the OSM programme, both internally and externally
- Providing for a range of technical solutions, and in doing so avoid unnecessary complexity

### **3 FACETS OF THE CHANGE MANAGEMENT PROCESS**

Table 1 lists the stakeholders in the change management programme, including Auckland City Council and other organisations with a role on the project, and the corresponding functional relationships.

#### **3.1 POLITICAL COMMITMENT AND LEADERSHIP**

Political commitment and leadership of the OSM programme, as a feasible and cost-effective response to managing the effects of growth, were seen as vital from the outset. In parallel with the development of the OSM programme (under the governance of the City’s Works Committee), the Planning Committee was responsible for decision-making toward the establishment of a new intensified “Residential 8” zoning (ie where the OSM programme will be applied) by means of a District Plan change.

As well as informal initiatives, the following steps were taken to achieve the necessary political involvement:

- A Joint City Works/Planning Committee Workshop was held in June 2001 to present and debate the findings of the “Alternative Stormwater Management Techniques Study” (WRCG, 2001); the reports recommendations met positive support, thereby providing a firm political commitment to the OSM programme
- Regular quarterly reporting to the Works and Planning Committees over the period mid-2001 to late-2002; noting:
  - the OSM and Soakage Manuals were formally adopted by Works Committee in September (it is noteworthy that several members of the Committee took the opportunity to speak highly of the proposed OSM programme)
  - following a decision by Planning Committee in November 2002, the proposed District Plan change was formally notified and requests for submissions on it

It is also noteworthy that a new Council was elected in October 2001. To ensure continuity, the incoming Works and Planning Committee members were briefed on the planned OSM programme.

### 3.2 BUILDING THE FOUNDATION

The next “tier” in building the foundation involved setting-up the arrangements for developing the OSM programme in general, and preparing the OSM Manual in particular. The development of the OSM Manual was undertaken as a consultancy project, project managed by Mitre Consultancy and executed by WRCG Ltd.

From the outset, the need was seen to establish a broadly-based “Project Steering Committee” to oversee the work and participate in decision-making. The committee comprised representatives from:

- **Auckland City Council:** Utility Planning (project sponsors for the OSM programme); City Planning (project sponsors for the District Plan change)
- **Consultants:** Project Manager; OSM consultant; Soakage consultant
- **Metrowater:** Council-controlled organisation for water and wastewater
- **Auckland Regional Council:** regional regulatory authority

**Table 1 – Project Stakeholders and Functional Relationships**

<b>CUSTOMERS / RATEPAYERS</b>				
<b>AUCKLAND CITY COUNCIL (ACC)</b>			<b>METROWATER (MW)</b>	<b>AUCKLAND REGIONAL COUNCIL (ARC)</b>
<b>Elected Councillors</b>			<b>Appointed Board</b>	<b>Elected Councillors</b>
<b>Planning Committee</b>	<b>Works Committee</b>	<b>Regulatory and Fixtures Subcommittee</b>		<b>Regional Council Committees</b>
<b>City Planning</b>	<b>Utility Planning</b>	<b>Auckland City Environments (ACE)</b>		
<b>Land Use Management</b>	<b>Stormwater Management</b>	<b>Regulator (District Plan)</b>	<b>Water and Wastewater</b>	<b>Regulator (Regional Plans)</b>
<u>Policies / Plans:</u> - District Plan - Growth Forum - Development Guidelines <u>Activities:</u> - Plan changes - Consultation on growth	<u>Policies / Plans:</u> - Technical manuals - Asset management - Educational material <u>Activities:</u> - Manage contracts: operations, planning & implementation - Quantity & quality management - Flood hazard management - Aquatic resource protection	<u>Policies / Plans:</u> - District Plan - Bylaws - Standards <u>Activities:</u> - Provision of LIM's & PIM's - Assessment & consenting of development proposals	<u>Policies / Plans:</u> - Development & Connection Standards - Asset management - Educational material <u>Activities:</u> - Water & wastewater services - Servicing development - Impliment ACC's contract for stormwater planning & operations	<u>Policies / Plans:</u> - Regional Policy Statement - Growth Forum - Regional Air, Land & Water Plan - Regional Coastal Plan <u>Activities:</u> - Regulation of plans - Assessment & consenting of development proposals

Governance

Responsible Group

Stewardship

### 3.3 EDUCATING AND INVOLVING STAFF

As a core element of the change management process, a series of briefings were held with City staff, to acquaint them with the proposed OSM programme and receive feedback. These were held in November 2001 and August 2002 (ie respectively, soon after the commencement of the project and then as the final draft version of the OSM Manual was coming together) with Auckland City, ACE and Metrowater personnel. The format of each session was broadly as follows:

- Introduction by the City’s Director, stressing the change management component of the OSM programme
- Briefing by the consultants on the proposed OSM programme, covering:
  - explanation of OSM devices and the way they work (including demonstrations with a working scale model)
  - planned implementation aspects (eg design, consents, operation & maintenance)
- Debate on the issues arising

Valuable feedback was received in each case and applied in the process of developing and refining the OSM Manual. Examples include the issue of staff resources for processing consent applications under the OSM programme, the need for a database to record OSM device details (and operation and maintenance records), the legal backing for enforcement provisions, etc.

A further initiative involved bringing to Auckland an Australian water sensitive urban design expert, Ms Mim Woodland of Newcastle University. As well as advising on the proposed designs for two new Auckland City community centres (refer 3.5), Ms Woodland gave lectures on matching water sensitive urban design features with an OSM programme.

### **3.4 FACILITATING THE DECISION-MAKING PROCESS**

As the project proceeded, numerous decisions needed to be made, covering a range of policy, technical, consent and administrative issues. These decisions were generally the prerogative of the Project Steering Committee. Given the relative newness of the OSM technology in New Zealand, consideration was given to the best way to facilitate effective and informed decision-making by the Project Steering Committee. The approach adopted involved preparing a Discussion Paper on each issue/topic, covering the background, explanation of the proposed approach to be applied (including options where relevant, along with a commentary on the merits of each option – with reference to overseas precedents where relevant) and finally a list of actions to resolve and/or apply the issue. These papers were circulated ahead of monthly Committee meetings, at which the papers were debated and the necessary decisions taken.

Discussion Papers were prepared covering the following topics:

- Permitted types of OSM devices
- OSM manual quality assurance and peer review provisions
- Design standards
- Water quality controls
- Operation and maintenance issues
- Risk issues
- Regulatory issues

Whereas the Project Steering Committee was party to decision-making, ultimate responsibility for decision-making was the prerogative of the project sponsors in the first instance and the Works and Planning Committees in the second instance. It is a tribute to the degree of unanimity in the Project Steering Committee that there were few cases where decisions were referred to the project sponsors, and then mostly just in cases where questions of the City’s resources and/or administrative procedures were involved.

A further approach guiding decision-making, especially in relation to more routine issues, involved the circulation to Project Steering Committee members (and others in some cases) of early drafts of OSM Manual. This gave people a preview of the OSM programme as it was taking shape. Feedback covered clarifications, suggested modifications and comments on both points of details and matters to be covered in later sections of the OSM Manual.

### 3.5 THE NEED FOR A CONSISTENT APPROACH

Various matters arose during the preparation of the OSM Manual which had impacts outside the immediate OSM programme. Some examples are listed below, along with comment on how they were resolved:

- **Soakage Manual:** As the OSM Manual took shape, it was evident that present requirements for soakage systems (which are in essence a type of OSM device) were outdated, leading to concerns as to their long-term sustainability. As a consequence, it was decided that the operation and maintenance arrangements proposed in the OSM Manual should also be applied to soakage devices. Rather than just change this aspect, a decision was taken to upgrade the Soakage Manual, using the OSM Manual as the new “benchmark”.
- **Effect of Rainwater Tanks on Charges for Water and Sewerage:** Metrowater is responsible for delivery of water supply and sewerage to customers in Auckland City. Under the OSM programme, rainwater tanks will have a dual water supply and stormwater control function. Water from the tanks will be available for non-potable domestic uses, leading to savings on mains water charges. Furthermore, because sewerage charges are related to water consumption, there will be savings here also for residents. Metrowater addressed this issue, in the context of both the potential loss of revenue and its commitment to conservation. Ultimately, Metrowater decided that the installation of rainwater tanks would not affect its charging regime, but that it reserved the right to review this position in the future.
- **Potential to Apply OSM Devices in Other Applications:** Although the OSM programme was conceived for application only in designated higher density “Residential 8” zones, the potential exists for its use in other areas where stormwater acts as a constraint to development. Consequently, as the OSM programme developed, provision was made for OSM devices to be used to mitigate exceedances to the normal 60% impervious area coverage limit for “non-complying” activities.

Arising from a resolution of the June 2001 joint Works/Planning Committee Workshop, an initiative is being taken to install OSM devices on selected City-owned buildings/facilities constructed from mid-2002. These are intended to serve as “demonstration” projects, allowing developers/others to inspect the OSM devices in operation, and to provide operational experience for evaluation in preparing subsequent updates of the OSM Manual. Photo 1 shows a rain garden under construction at the Wesley Community Centre.



**Photo 1 – Rain Garden at Wesley Community Centre**

### 3.6 TECHNICAL AND LEGAL REVIEWS

Once substantially complete versions of the OSM and Soakage Manuals were available, they were issued for technical and legal reviews. In each case, review briefs were compiled to augment verbal briefings, and particular questions put to the reviewers. The intent was to firm-up the robustness of the Manuals, in both technical and legal/enforcement terms. The technical review was facilitated by the preparation of “companion volumes” covering matters such as the background to key decisions, the basis for the simplified design charts, risk assessment, detailed technical information, etc.

The main actions arising from each of the reviews were as follows:

- **Technical:**
  - additional measures for water quality control (applies to OSM Manual only)
  - modifications to standard design details and drawings

- other points designed to improve user-friendliness
- Legal:
  - addition of a “disclaimer” statement
  - clarification of the relevant provisions available under the Resource Management Act, Building Act, Local Government Act and City By-Laws (ie from which agreement was reached as to the specific provisions to be applied to the OSM programme)
  - addition of a chart clarifying the consenting and enforcement provisions

A further review covered the issue of the uses to which the rainwater tank water could safely be used. To address this, Auckland City commissioned a risk assessment study by a leading New Zealand water supply chemist. His report identified clear risks in the urban environment of contaminants in the tank water. As a result, use for drinking on a regular basis was considered to pose an unacceptable level of public health risk, although the risk of occasional/accidental ingestion was not seen as reason to ban tank water use per-se. Against this background, the OSM Manual lists the uses considered appropriate in the Auckland City situation; namely toilet flushing, outdoor use and cold water feed to the clothes washing machine. To provide further guidance to tank owners, the OSM Manual incorporates an interim rainwater tank “code of practice” setting out design and operation/maintenance practices that the householder should be aware of.

### **3.7 RAISING PUBLIC AWARENESS**

One of the main lessons from the City of Portland precedent was the need for a public awareness-raising programme to complement the OSM programme. Initiatives by the City in this context cover:

- Under Development:
  - general brochure on the basics of stormwater
  - leaflets on the OSM and Soakage Manuals
- Proposed (details being formulated):
  - articles in the City’s free weekly newssheet “City Scene”
  - internet site
  - scale-model demonstration OSM devices
  - signage at OSM pilot sites (including new City community centres)

### **3.8 STAFF AND EXTERNAL TRAINING**

At the first staff briefings, plans were foreshadowed to undertake training of staff who will be involved in advising developers/owners on the OSM programme, and processing OSM consent applications. This work will be the responsibility of Auckland City Environments (ACE). Training of ACE staff covers:

- General: a series of hour-long “familiarisation” sessions with groups of 20 – 50 staff (note that this included staff who will not be directly involved; their participation was seen by ACE management as presenting a good example of how the City was taking an innovative approach to meeting growth demands)
- OSM Manual and Soakage Manual: three-hour sessions on the detail of each Manual and how it will be applied; a key component was a “worked example” on a consent application
- Follow-Ups (yet to be held): workshop sessions to cover matters arising from early experience on processing consents

As well as public awareness-raising and ACE staff training, implementation of the OSM and Soakage Manuals requires a parallel familiarisation exercise for developers and consultants. Although details have yet to be finalised, it is intended to undertake this through a series of breakfast briefings. As well, because the operation and maintenance regime set out in both manuals requires “service visits” by contractors, briefings are planned in this context also.

### **3.9 IMPLEMENTATION OF THE MANUALS**

One of the challenges of the project has been to ready the OSM and Soakage Manuals for implementation to match the parallel programme of changes to the District Plan which will introduce the new intensified “Residential 8” zone. Finalising the Manuals too far ahead of time would run the risk of matters arising from the Plan change not being able to be accounted for. Also, there would be a lag before training, with the attendant risk of losing the impetus. Conversely, running late would leave the City open to challenges that the impacts of the Plan change could not be properly assessed without the OSM Manual, and as a result the Plan change submission exercise could be compromised.

Similarly, it is desirable to implement the Soakage Manual in parallel with the OSM Manual, given the clear similarities with the provisions, especially those in relation to operation and maintenance. Against this background, the implementation date for both Manuals has been tentatively set at 1 June 2003.

## **4 COMMENTARY**

Overall, the work to develop and implement the OSM and Soakage Manuals has gone largely according to plan. Similarly, and hopefully due to the careful pre-planning, few surprises arose from the change management programme. The following observations illustrate experiences from the work:

- A key component of the change management programme was recognising the need for change from the outset and then ensuring that the OSM programme was designed to reflect, in full, the key outcomes of the Regional Growth Forum (ARC, 1999)
- Setting budgets for the work proved somewhat speculative, due to both the innovative nature of the OSM programme and the inherent uncertainties at the commencement of the project
- Aside from the careful pre-planning, the change management component involved only modest extra effort. It is noted, however, that without a proper change management component, there would have been a real danger of problems arising, including internal resistance to the imposition of the OSM programme
- It was difficult to judge how often to hold formal staff briefings, the concerns being the downsides of too often (ie not much new to cover since the last one) or not often enough (ie leading to staff feeling marginalised)
- With staff briefings, careful attention was paid to “setting-the-scene”, so that staff could see the bigger picture. Also, OSM model demonstrations were used to bring-to-life what would otherwise have relied on explanations against photos and sketches of the devices
- Feedback from stakeholders has been universally positive, including at political level where there is clear pride in the ability to “deliver” an innovative approach to meeting the impacts of growth on stormwater

## **5 LESSONS**

In summary, the main positive lessons are considered to be as follows:

- Designing-in a formal change management programme has facilitated a “no surprises” outcome to the OSM programme
- The value in “networking” with other experts in the OSM field, for guidance on precedents, ideas-sharing, etc
- The importance of getting the City politicians and senior managers “on-board” the OSM programme at an early stage
- The Project Steering Committee approach proved very effective, both for communicating and decision-making
- The benefits in involving City personnel at an early stage and then on throughout the process

- No resistance of note was experienced from stakeholders in respect to the proposed OSM programme

In practice, there were no serious negatives. However, the following observations can be made in respect to potential improvements, were one to be embarking on a comparable programme again:

- In programming the work, more time should have been allowed for the policy development aspect, reflecting that it tends to take longer than anticipated (fortunately in this case, slippage in the parallel District Plan change programme allowed more time for the policy development component)
- Ideally, the public awareness-raising programme (see 3.7) should have been initiated earlier (the actual timing was attributable to budgetary constraints); also the lead-time to get brochures produced was appreciably longer than expected
- The membership of the Project Steering Committee (see 3.2) could have been more widely-based; in particular, it would have been valuable to include a member from the City's consenting authority, Auckland City Environments

## 6 CONCLUSIONS

Devoting close attention to designing and implementing a change management programme as part of the OSM programme has paid positive dividends. Few surprises occurred along the way and there has been a good level of buy-in to the OSM and Soakage Manuals. Staff have felt involved and there appears to be a degree of pride in the innovation and leadership shown by the City in its OSM programme. And finally, the programme has successfully met, in full, the key outcomes set out by the Regional Growth Strategy (ARC, 1999), as summarized in 2.

## ACKNOWLEDGEMENTS

- Auckland City: Utility Planning, City Planning and ACE personnel
- Members of the OSM Project Steering Committee
- City of Portland, Bureau of Environmental Services personnel

## DISCLAIMER

This paper reflects the views of the authors and should not necessarily be construed as matching Auckland City's official position on the matters covered.

## REFERENCES

- ARC (1999): "*Auckland Regional Growth Strategy 2050 – A Vision for Managing Growth in the Auckland Region*", Auckland Regional Council
- Auckland City (2000): "*Growing Our City Through Livable Communities 2050 Strategy*"
- Auckland City (2003a): "*On-Site Stormwater Management Manual*"
- Auckland City (2003b): "*Soakage Design Manual*"
- Forum (1997): "*Auckland City Toolkit*"
- Laing, M (2001): "*Building Capacity in Councils and Communities to Undertake Urban Water Cycle Management*", Paper to Stormwater Industry Association Conference, Port Stephens, NSW, April 2002
- Menzies, M & Paterson, G (2002): "*Auckland's On-Site Stormwater Management Programme – A Cost-Effective Response to Urban Intensification*", Paper to NZWWA Stormwater Conference, Hamilton, June 2002
- UPRCT (1999), "*On-Site Stormwater Detention Handbook*", Upper Paramatta River Catchment Trust, NSW
- WRCG (2001): "*Alternative Stormwater Management Techniques – Project Report*", Water Resources Consulting Group Ltd, Auckland

## **ABBREVIATIONS**

ARC	Auckland Regional Council
OSM	On-site stormwater management
WRCG	Water Resources Consulting Group Ltd