

WATER MANAGEMENT – A CORPORATE COMMITMENT

Abstract

This report proposes that Angus Council adopts a comprehensive strategy to promote the effective management of water as a corporate resource and agree a Water Management Policy which supports this initiative.

RECOMMENDATION

The Resources and Central Services Committee is recommended to:

1. note the contents of this report;
2. approve the adoption of the proposed Water Management Strategy;
3. approve and adopt the proposed Water Management Policy Statement
4. approve a contribution of £100,000 from the Property Renewal and Repair Fund in 2005/06 to establish the Water Management Fund.

1 INTRODUCTION

It is well recognised that water is becoming a valuable resource due to the rising costs for its supply and disposal and the problems with availability caused by climate change. Even in Scotland, which is known for its abundant rainfall, there have been supply difficulties in previous years.

This report recommends the introduction of a corporate water management strategy to be managed by the Property Services department, through its Energy Management Unit, and resourced from a new Water management Fund.

2 BACKGROUND

Water suppliers have introduced changes to water tariffs in an effort to both increase income to meet the costs of meeting EU standards and redistribute impact across the community. The pressure to introduce water meters, reduce the dependency on income based upon property rateable value and reduce or remove charitable status discounts have all had a growing impact on the Council as amply demonstrated by the serious concerns raised by the Education department in early 2002/03 when standing charges for water meters grew like Jack's beanstalk overnight.

Many organisations, including local authorities, have established a centralised approach to water management which enables a structured approach to be taken to manage the scale and cost of their water consumption.

A recent cross-cutting review has recommended that the introduction of a corporate approach to water management which would enable Angus Council to achieve these benefits. Such arrangements enable councils to fulfil part of their LA21 and sustainability obligations through the effective management of water consumption and waste water and rain water disposal.

Many Scottish local councils are already managing water in a similar manner. Water consumption is also monitored with in Asset Management Planning.

In the interim period, the Property Services department has become a focal point, on behalf of Angus Council, with Scottish Water culminating in a review of all metered supplies and a programme of jointly funded meter right sizing being undertaken currently to address problems resulting from the withdrawal by Scottish Water of "virtual metering" arrangements which compensate for oversized meters which incur high standing charges. This initiative is saving Angus Council ~£75,000 p.a. for meter standing charges, back dated to 2002/03 from a Council invest of ~£4,000.

3 CORPORATE WATER MANAGEMENT

3.1 Overview

The techniques adopted for the management of energy consumption and the reduction of CO₂ production are also the techniques which are needed to manage water consumption namely: -

- corporate management by the Energy Management Unit
- introduction of water consumption monitoring, profiling and targeting
- water audits
- good housekeeping
- water consumption reduction Spend to Save project programmes
- performance review
- support to the water management strategy through: -
- design and maintenance standards
- extending the remit of the Energy Management Steering Group
- education and awareness
- contract management
- support to Local Agenda 21 and sustainability

The adoption of a Corporate Water Management Policy, strategy and targets, as detailed in Appendix 1, will clearly demonstrate the Council's commitment to effective Water Management.

3.2 Corporate Management

The benefits of a corporate approach to energy management are beginning to appear and will expand in 2005/06. The experience gained in achieving progress to date and the progress planned for the future are valuable to the management of water consumption and it would be irresponsible not to benefit from this knowledge and experience.

3.3 Water Consumption Monitoring, Profiling And Management

The Energy Management Unit [EMU] already has the specialist software, STARK used to manage energy invoices, necessary to manage water data. It treats water in the same manner as energy fuels, as a valuable resource capable of being monitored, profiled, targeted and managed, working to reduce consumption to national maxima.

It is not proposed that the Property Services undertake the processing of water invoices but rather that Departments should extract appropriate data whilst processing invoices and forward it to the EMU within standardised spreadsheets which can easily be uploaded into STARK. Consumption data for 2004/05 and the two preceding financial years will need to be gathered to provide a historical context to permit trend analysis. Departments would remain responsible for ensuring the proper payment of invoices and the Property Services department would assist by providing guidance on areas for detailed checking based upon the processes adopted by the Education department and the experiences of other local authorities.

Water consumption will not be available for those buildings charged on a rateable value basis. In these cases action will be needed to obtain consumption data to decide whether benefits could be achieved by converting to metered supplies.

3.4 Water Audits

The EMU have gained valuable experience in undertaking energy audits and reviews using on-site inspection, historical consumption and benchmarks to assess individual property performance and identify costed opportunities for improvement. This expertise can be expanded to apply to water management.

3.5 Good Housekeeping

As with energy management, good housekeeping can contribute to the effective reduction of water consumption particularly when supported by education and awareness schemes.

3.6 Spend To Save

As with energy management, whilst good housekeeping and general awareness can make a contribution, major change will occur as a consequence of Spend to Save investment and the adoption of best practice techniques in new development and refurbishment projects.

Spend to Save investment will facilitate projects to be undertaken to reduce water consumption, reduce effluent production and increase the recycling of rainwater to flush toilets rather than use conventional water supplies.

3.7 Performance Review

It is essential that processes are in place to evaluate the success or failure of initiatives taken to reduce water consumption. This is particularly important when Spend to Save projects are being undertaken and when major new build or refurbishment projects are being undertaken.

Such "progress review" will identify those initiatives which have proven successful and should be repeated, those where some improvement could be achieved the next time opportunity permits and those which have failed, to identify causes and avoid repetition in the future.

Such exercises can only be undertaken effectively if detailed consumption data is available for both the year immediately before and the year immediately after any such initiative is undertaken. Consequently most reviews take place some 15 - 18 months after initiative completion.

It is also essential that the forecast impact of initiatives has been carefully calculated during the planning stage to establish a performance achievement target. Such calculations are generally necessary to secure approval to proceed.

4 SUPPORT TO THE WATER MANAGEMENT STRATEGY

4.1 Design And Maintenance

Experience with energy management has demonstrated that the adoption of sound design and maintenance standards can make a significant contribution to reducing consumption, emissions and cost thereby contributing to the council's LA21 strategy through sustainability best practice.

In the case of water, this means ensuring that all existing water consumption is optimised and swift action taken to address excess consumption whether as a consequence of failed infrastructure, old equipment, poor management or lack of awareness.

The adoption of best practice techniques in new development and refurbishment projects will make a major contribution but will require broad acceptance of a Whole Life Costing approach to the Financial Plan and other funding sources. Client budget holders will need to accept that the initial financing constraints imposed on projects must be relaxed to enable new approaches to be introduced which will provide significant benefit by reducing annual running costs and contributing to the Council's LA21 and sustainability objectives.

Such Best Practice can also be rolled out to departments to support their good housekeeping initiatives.

4.2 Strategic Management - Energy Management Steering Group

A corporate water management strategy is best undertaken with the support and assistance of an inter-departmental support group and it is considered that the remit of the Energy Management Steering Group should be expanded to include these responsibilities.

4.3 Education And Awareness

As detailed in Section 2.5 good house keeping can contribute to water conservation but requires a commitment to regular education and awareness to ensure that good practices are reinforced and bad practices negated. The extension of the remit of the Energy Management Steering Group will ably support this initiative.

4.4 CONTRACT MANAGEMENT

Unlike energy management, the Council is currently unable to tender its purchase of water supplies and consequentially benefit from economies of scale from the Consortium approach.

It does however have the ability to work in partnership with other Scottish councils and CoSLA to apply pressure on the Scottish Executive and Scottish Water for beneficial action.

The EMU is well placed to assist in this process through the Scottish Energy Officers Network which fulfils this role for energy management and where water management is already an active issue. The Maintenance and Energy Programmes Manager, responsible for the EMU, is an active member of this forum.

4.5 SUPPORT TO LA21 AND SUSTAINABILITY

Effective water management and the reduction of demand on natural resources is a major element of the LA21 and general sustainability strategy. Reducing consumption helps to reduce the energy consumed, and the CO₂ emissions, from electricity used in water processing.

The Council can both demonstrate by its actions and inform and encourage the local community to contribute to addressing the protection of the environment by the adoption of the approach detailed in this report.

5 RECOMMENDATIONS

It is therefore recommended that:

- the Council adopt a corporate approach to water management through a strategy, action plan and associated targets, as detailed in Appendix 1.
- the Property Services department be made responsible for corporate water management and work in partnership with other departments to achieve the Council's objectives in accordance with the practices detailed in this report.
- departments remain responsible for ensuring the proper processing and payment of invoices and the Property Services department assist by providing guidance on areas for detailed checking based upon the processes adopted by the Education department and the experiences of other local authorities.
- the financial and reporting arrangements detailed in this report are adopted.

6 FINANCIAL IMPLICATIONS & FUNDING ARRANGEMENTS

It is recommended that: -

- the Council establishes a Water Management Fund which will be managed on a similar basis to the arrangements being established for the Energy Efficiency Fund, Report No 1008/04, whereby the savings resulting from each "Spend to Save" project flow back in to the Fund within the year each project is completed and for the duration of each project's pay back period.
- a contribution of £100,000 is made available from the Property Renewal and Repair Fund in 2005/06 to establish the Water Management Fund. This contribution can be contained within the provisions of the Property renewal and Repair Fund for 2005/06.
- the Property Services department accommodate the costs of the necessary adjustments to STARK and the gathering and entry of the three years of historical data within the resources at its disposal.
- an allocation from the Water Management Fund be utilised to undertake investigations to determine the water consumption for those buildings which are currently charged on a rateable value basis. This will enable a determination whether savings can be achieved by converting to metered supplies. No savings would result if the current charging mechanism remained most appropriate.
- the Water Management Fund be utilised for "Spend to Save" projects and to assist major new build and refurbishment projects to incorporate water saving initiatives when, in exceptional circumstances, project funding is insufficient.

- departments accept a Whole Life Costing approach to the Financial Plan and other funding sources.
- the Property Services department submit reports to the Resources and Central Services Committee detailing the programme of “Spend to Save” projects it proposes to undertake, and the anticipated annual savings and related payback periods, on the same basis as currently employed for Energy Management “Spend to Save” and Energy Efficiency Fund “Invest to Save” projects.
- the Property Services department submit annual End of Year reports to the Resources and Central Services Committee detailing the progress made in reducing water consumption and costs.
- the Finance department submit regular progress reports on the status of the Water Management Fund, on the same basis as is currently employed for the Property Renewal and Repair Fund and will be introduced for the Energy Efficiency Fund.

7. HUMAN RIGHTS ACT IMPLICATIONS

There are no Human Rights Act implications specific to this report.

8. CONSULTATION

The Chief Executive, the Director of Law & Administration and the Director of Finance have been consulted in the preparation of this report.

9. CONCLUSION

The Resources and Central Services Committee is recommended to note the contents of this report; approve the adoption of the proposed Water Management Strategy and to approve and adopt the proposed Water Management Policy Statement.

REFERENCES

<u>Committee</u>	<u>Date</u>	<u>Report No</u>	<u>Subject</u>
Policy and Resources	09 September 1997	917/97	Energy Management - A Corporate Commitment

APPENDICES

Appendix 1 Water Management Policy Statement

background papers

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information), were relied on to any material extent in preparing the above report.

M G Lunny
Director of Property Services

Appendix 1 **Water Management Policy Statement**

Water Management Policy

Angus Council is committed to the effective management of water, as a corporate resource, with the express intention of contributing to the conservation of the natural environment through the reduction of overall water consumption of its non-housing estate. It aims to meet best practice in water consumption to fulfil the council's obligations within the Local Agenda 21 strategy.

Water Management Strategy

Angus Council will, in support of its policy, :-

- create and sustain through the medium of the Property Services Department a high profile and priority for water management in the Council,
- establish sufficient robust and long term funding arrangements which will ensure that Angus Council is capable of discharging its best practice obligations,
- establish and continuously adjust realistic water reduction targets for each department and building,
- carry out an ongoing programme of water audits to establish the efficiency of each building and make recommendations as to the management, operation and physical improvements required,
- establish and maintain a comprehensive water database prioritising the works required to improve the water efficiency of all operational buildings,
- implement an annual programme of physical and management measures to improve the water efficiency of all operational buildings including utilising and supporting planned property development and refurbishment projects,
- take steps by means of co-ordination, management, training, publicity, education and where appropriate incentives, to encourage, involve and motivate staff in becoming actively involved in water conservation,
- negotiate the purchase of water on competitive terms to ensure that the Council receives best value,
- receive and consider at least annually reports on progress made and the benefits realised to date.

Water Consumption and Local Agenda 21

Angus Council aims to achieve to a phased reduction in water consumption, subject to the impact of any transfers of buildings from un-metered to metered supplies, which will ensure it meets the following target reductions:-

1. reduce average water consumption in offices to 8m³ per person per annum;
2. reduce average water consumption in schools to 4 m³ per pupil per annum;
3. reduce overall water consumption in non-housing buildings by 5% by 2007/08.