



SUSTAINABLE DEVELOPMENT ADVISORY PANEL – 10TH APRIL 2014

SUBJECT: WATER CONSERVATION

REPORT BY: ACTING DIRECTOR OF CORPORATE SERVICES & S.151 OFFICER

1. PURPOSE OF REPORT

- 1.1 To outline to the Sustainable Development Advisory Panel recent progress made on water conservation. Noting some of the available opportunities to save water, and a recommendation for benchmarking and reporting consumption on key properties.

2. SUMMARY

- 2.1 The energy Management Team is working to strengthen all aspects of water conservation, including capturing water bill data, additional reporting and benchmarking.
- 2.2 There will also be physical improvements to save cost and consumption such as downsizing water meters to reduce standing charges and by implementing water conservation products where practicable.
- 2.3 The report also outlines progress made to date on water conservation.

3. LINKS TO STRATEGY

- 3.1 Water conservation links directly to conserving resources.

4. THE REPORT

- 4.1 The Energy Management Team has collated water bills on a number of key properties such as Tredomen House, Pontllanfraith House, Penallta House, and the Woodfieldside units.
- 4.2 The Energy Management Team has assisted a number of properties over the years in identifying water leaks and importantly reclaiming the sewerage element charges back of Welsh Water. Reclaim charges can be considerable, approximately £10k on Tredomen House, Blackwood Comp £582 and £907 on Nelson Boys and Girls Club. On Cwm lfor primary school £11,367 was recovered due to billing issue with Welsh Water.
- 4.3 The annual charge for water across the authority is approximately £730k per year based on finance records.
- 4.4 The new central payment system implemented by the energy management team will free up some time to provide more focus on water billing.

- 4.5 This focus will be on obtaining more billing information. Better reporting to the authority. Greater assistance on leak detection and reclaiming charges from Welsh Water.
- 4.6 There will also be a drive to reduce water meter sizes where reasonable and practicable.
- 4.7 Pontllanfraith Comprehensive and Leisure centre, which share a site, both have a water supply, both of which have a split 80/20mm meter set up. This means that the 80mm is there to register high water flows and the 20mm is there to register the low flows. Oversized meters incur a higher standing charge. By downsizing from an 80mm to a 50mm meter we can save £1,510 in standing charges per meter per year.
- 4.8 To downsize accurately we will need to data log flows for a period, which will enable the correct sized meter to be identified. We have done this at Pontllanfraith Comprehensive school and have found that the water meter size should be 40mm therefore the standing charge saving at this site will be £2,145 per year. The cost of the physical meter exchange would be £1,200 giving a payback rate of below 12 months.

Promotion & Conservation.

- 4.9 During Climate Week 2013 Welsh Water and Aqualogic set up a demonstration stall in the reception of TY Penallta to promote water conservation technologies. Those that participated received a £50 product pack through the post containing water conservation devices e.g. water efficient shower heads, in line flow restrictors and water conservation products for the garden.
- 4.10 The Energy Management Team obtained £52k worth of investment from Welsh Water in 2013. The investment was a combination of water audits for high use schools and leisure facilities. Sample Audit attached. The recommendations from the audits e.g. urinal controls, push taps and in line flow restrictors in taps, were paid for and installed free of charge by Welsh Water.
- 4.11 All of this installation work was completed by the end of November 2013. The technical payback rate on Welsh Waters investment across all of the 50 plus buildings was within a two year period. Welsh Water calculated that this would save the authority 44,000 cubic meters of water, with an average building saving of 39% of consumption.
- 4.12 School Budget Forum asked if all remaining schools could receive the audit and investment from Welsh Water. Welsh Water offered to pay for the installation and water conservation devices if the schools paid for the audits. A primary school audit was costed at £250. When the remaining schools were contacted, only 4 were interested in taking up the offer.
- 4.13 It is proposed that the authority report annually on TY Penallta, Pontllanfraith house and a few other key properties as a starting point for benchmarking water consumption. These will be reported through to the Welsh Assembly Government. As additional data is gathered the key buildings and building groups e.g. leisure centres with swimming pools will be added to this reporting function over time.

5. EQUALITIES IMPLICATIONS

- 5.1 There are no equalities implications.

6. FINANCIAL IMPLICATIONS

- 6.1 There are no financial implications.

7. PERSONNEL IMPLICATIONS

7.1 There are no personnel implications.

8. CONSULTATIONS

8.1 No consultations, the report is for information purposes only.

9. RECOMMENDATIONS

9.1 To note the progress made to date and to support the recommended improvements on downsizing of water meters and the implementation of water conservation technologies where practicable.

9.2 To support the additional reporting functions.

10. REASONS FOR THE RECOMMENDATIONS

10.1 The recommendations will assist in reducing water consumption and cost for the authority.

11. STATUTORY POWER

11.1 N/A.

Author: Paul Rossiter, Energy and Water Conservation Officer
Consultees: Colin Jones, Head of Performance and Property Services
Paul Cooke, Team Leader, Sustainable Development & Living Environment

Appendix: Water Management Audit Report