

Water Action Plan for Brighton & Hove (Draft version 2)

Introduction:

Brighton & Hove City Council is passionate about developing a sustainable future for the city and its communities. As the Leader of the council, I am determined that we shall achieve such an ambition and be at the forefront of sustainability thinking and practice in the UK. The biggest sustainability challenge facing us today is our changing climate and I believe it is right for the council to take a lead in the city in developing actions to mitigate and adapt to climate change.

The council has already made great progress. We signed the Nottingham Declaration on Climate Change in 2005, developed a Climate Change Action Plan for Brighton & Hove in 2006, and in 2007 produced a five year Strategy and Implementation Plan for reducing carbon emissions from our own operations by 20%. The development of a Brighton & Hove Climate Change Strategy for the city is also planned for the near future.

However, one of the major pressures placed on the local area and the city as a result of the impact of climate change will be a reduction in the availability of water. As a natural resource, water is often taken for granted; particularly in a country where the general perception is that it always rains. Yet in reality, the UK has less water available per person than most other European countries, and the Southeast region has less water available per person than the Sudan and Syria.

The need to conserve what water we have, as well as adapt to future shortages brought on by rising temperatures and unpredictable rainfall, requires a sustainable water management plan for the city. Such a plan will focus on reducing demand for water, achieving high levels of water efficiency, and exploring alternative water management measures in the city. A successful plan will not only reduce the councils and the cities water use but, if a significant decrease in hot water use is also achieved, substantial carbon emissions savings can also be realised.

The council, as a public authority, has a duty placed on it by the Water Act (2003) to take into account the benefits of conserving water supplied to our premises both in terms of our actual use of water and where our functions might have an impact on water use. Here at Brighton & Hove we take this duty very seriously. I am keen however, that we do not see this duty as only the minimum required of us in terms of water management. Instead, we should be striving to explore every avenue to promote water conservation and efficiency not only in our own buildings and operations but also in the wider city, as a key measure in our efforts to mitigate and adapt to climate change locally.

At Brighton & Hove City Council, we are extremely proud of the progress we have made so far in responding to the demands brought about by climate change. It is hoped that this Water Action Plan for Brighton & Hove will go a long way to focusing attention on a resource which is so integral to the well-being of the people and the local environment which make up our city and region and yet, will be greatly threatened by the impact of our changing climate.

This plan and the actions included in it, has been developed in consultation with a wide number of council officers, key partners and stakeholders, and water agencies in order to achieve a

holistic and wide ranging approach to managing our water resources in the city. However, we would greatly welcome any additional ideas, suggestions, or comments, of how we might improve this plan.

Please email your comments and suggestions to: sustainability@brighton-hove.gov.uk or **send them to:** The Sustainability Team, WAP, Room 236, King's House, Grand Avenue, Hove, BN3 3LS

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Leader of Brighton & Hove City Council

Water and Climate Change:

The report of the Intergovernmental Panel on Climate Change (IPCC) in February 2007, confirmed a global scientific consensus that climate change is happening, that it is directly related to human activity, and that the impact of climate change on our water resources and supplies is going to be extremely damaging.

In Europe, there is already evidence that the glaciers of the Alps are disappearing and that droughts in the Mediterranean are worsening. Globally, a lack of melting ice from mountain ranges at crucial times of the year is affecting glacier-fed rivers used by farmers to irrigate their fields, so impacting on agricultural productivity. Melting ice from the poles is causing sea levels to rise and will continue to do so by at least half a meter by 2100, according to the 2007 IPCC report, so effecting costal dwellings. And, in the tropics, high sea temperatures have already contributed to more frequent exceptional storms and hurricanes which in turn cause floods and lethal landslides.

On top of this, predicted warmer temperatures will increase evaporation rates from the soil and from the surface of reservoirs, and cause reduced rainfall. In the Southeast of England, the Met Office has predicted that total rainfall could halve in the next forty years. Such a bleak picture of the effects of our changing climate on the earth's water resources highlights the need for a sustainable water management plan.

Water and Carbon Emissions:

Achieving water efficiency in the UK will not only readdress the demand/supply balance but, along with a reduction in hot water use, will also achieve significant carbon emission reductions and thus help to mitigate against the effects of climate change.

The process of abstracting, transporting, and treating water uses a significant amount of energy and thus releases a considerable amount of carbon dioxide (CO₂), a greenhouse gas which is responsible for causing climate change, into the earth's atmosphere. In 2005/06, the water industry in the UK emitted about 4 million tonnes of CO₂. It is estimated that on average, to process 1 million litres of supplied water and wastewater results in the release of 404 kg of CO₂. This is the same as a car travelling a distance of 1836 km.

An average family of four uses about 200,000 litres of water per year. This requires 94 kwh of energy to supply the water and 83 kwh to subsequently treat the wastewater and results in the release of 78 kg of CO₂. Achieving a 10% reduction in total household water demand in the UK would result in carbon savings of 126 tonnes per day or 45,990 tonnes per year.

Use of hot water in the home, from baths, showers, taps and white goods emits in total about 30 million tonnes of CO₂, which is just over 5 % of the total UK greenhouse gases emitted. A reduction of 15% would save 4.5 million tonnes of CO₂, which is the equivalent of taking 800,000 cars off the road. These reductions in water demand and hot water use can be achieved through simple water saving and efficiency measures.

Water as a Global Resource:

Water is vital to life on this planet. No living thing can sustain itself for long periods without access to it, and it is the habitat for wildlife species all across the planet. Yet as a resource it is often taken for granted, particularly in developed countries where instant access to safe, clean, drinking and washing water gives the impression of an abundant and continuous supply.

The earth's water source is in fact made up of 97.5% salt water and only 2.5% fresh water. Of this 2.5%, 68.9% is frozen in glaciers and in the polar icecaps, 30.8% is present in soil moisture and underground aquifers, and less than 0.3% is stored in lakes and rivers and available for human use. From the 20th Century onwards, water has been exploited for domestic, business, and agricultural use on a scale previously unseen, and little thought has been put into the impact of such mass extraction. The world's thirst for water has now become one of the most pressing resource issues of the 21st Century.

Access to clean water is considered a basic human right; yet 1.1 billion people still have inadequate access to water and 2.6 billion people lack basic sanitation and by far the majority of these live in poor, developing countries. This is in stark contrast to the richer, developed countries where high quality water for drinking, flushing the toilet, and bathing is available on demand and in seemingly continuous volume. Water as a resource has, particularly in rich countries, unsurprisingly become valued as a reliable and replenishable commodity.

However, the availability of fresh water for human use will be seriously threatened by the changes brought about by climate change. Rising temperatures caused by the release of carbon dioxide (CO₂) into the earth's atmosphere will reduce the earth's supply of fresh water as glaciers melt into the sea, rivers and lakes dry up, and changing rates of rainfall make refills difficult to predict and droughts common place. Stormy weather, flash floods, tsunamis, and other extreme natural disasters are also likely to impact on and disrupt the water sources which we use. Such disruption will greatly affect the poorest countries, exacerbating mass hunger, disease, and malnutrition as well as destroying livelihoods and families. It will also impact upon the well-being of people and wildlife in developed countries, if we are not adequately prepared for it, as food sources and forms of recreation become affected.

Water in the UK:

The UK is a densely populated small island surrounded by sea water with surprisingly few sources of fresh water. Despite the general belief that it is always raining in the UK, in comparison to other European countries there is actually less water available per person. London is drier than Istanbul, and the southeast region has less water available than the Sudan and Syria. Water is already scarce across much of the UK and with recent low rainfall and a reduction in groundwater and reservoir levels, drought is already occurring on a large scale.

Water consumption in the UK has been rising by about 1% each year since 1930 and in 2004 the national mean consumption for each person was about 155 litres of water used everyday. It is predicted that use of and demand for water is likely to continue to rise particularly, if the trend in demographic changes and populations shifts result in more large scale buildings projects and single house occupancy in already dry areas. The need to match demand with supply is likely to become a crucial issue in many areas of the UK.

The percentage of water used in each water using area of the average home is as follows: toilet flushing 30%, personal washing (baths & taps) 21%, personal washing (showers) 12%, clothes washing 13%, washing up 8%, outdoors 7%, drinking water 4%, and other 5%. If water efficiency can be achieved in some of these areas by introducing such mechanisms as dual flush lavatories, low flow taps and showerheads, water butts, and rainwater harvesting, a reduction in household water consumption can be achieved with relatively low impact in terms of restricting consumer use.

Increases in water use and demand without significant increases in supply will place tremendous stress on the water system in the UK and is likely to force the price of water up. With price reviews due to be undertaken in 2009 and prices being set for the next 5 years, there is every chance that the price of water will rise so high that it limits the affordability of water for low income households. This could potentially be a real area for increasing poverty and reducing equality of opportunity in some areas of the UK. The government suggests that customers should spend no more than 3% of a households income on water and sewerage bills. Many households currently spend up to 9% of their income on water bills. Any water management system will need therefore to take into account the aspect of water affordability.

The UK has for some years struggled with an increasing demand for water that supply is unable to match with increasing consumption from the public and the effects of climate change resulting in drought and less rainfall, this situation is only likely to worsen. It is essential then that a national sustainable water management system and plan be put in place as soon as possible, and there are various key national agencies working to make this so.

Water in the Southeast region and Brighton & Hove:

The Southeast region is an area of serious water stress; not only is it naturally the driest region in the UK, but demand for water is above the national average at about 169 litres per person per day. The Southeast is also unusual as 70% of its water supply comes from groundwater and only 30% from rivers and reservoirs. With the recent lack of rainfall in the region due to hotter summers and drier winters, groundwater sources, underground aquifers, and reservoirs are all at dangerously low levels.

Exacerbating this natural shortage is the prospect that the Southeast is expected to witness rapid development in new housing, as well as a rise in demand for water for farm irrigation, garden sprinklers, and swimming pools. If use and demand for water does not decrease it is probable that it will become increasingly difficult to balance high demand during seasons of declining supply.

In the Southern Water Sussex supply area, a hosepipe and sprinkler ban was put in place in June 2005, and in June 2006, Southern Water was forced to apply for a drought order which, if put in place, would have meant further restrictions on water use. Whilst the drought order was never actioned and the hose pipe ban was finally lifted in December 2006, the regions water sources have yet to return to a sustainable level, with groundwater levels still typically below the average and within the drought trigger zones. Whilst the winter of 2007 has been wetter than expected it is unlikely that enough water has been captured in the recharge season (Oct – Mar) to ward off more bans and potential drought orders in the summer of 2007.

When the impacts of climate change in the southeast and Brighton & Hove are factored into this already highly water stressed area, it becomes apparent that water shortage is not only a thing of the present, but is likely to be a major issue in the next couple of years.

Recent water efficiency campaigns in the southeast region have typically resulted in a 10% reduction in water demand, which demonstrates that there is the drive and ability to save a significant amount of water. However, the difficult task is to maintain a 10% reduction throughout the year, and work to decrease demand even further to enable future droughts brought on by climate change and high demand to be avoided.

It is essential then, that Brighton & Hove City Council and its partners in the city, and across the region, work hard to promote water efficiency and saving as an essential part of the goal to achieving a sustainable way of life and to mitigate and adapt to the challenges faced by climate change. A sustainable water management plan will go along way to ensuring that the council leads on achieving this.

What the council achieved already:

Brighton & Hove City Council is a significant water user, irrigating parks, sporting fields, public gardens and other open spaces, as well as using water for other council operations. As the local planning authority, the council is in a unique position to shape public attitude and behaviour regarding water conservation and to set standards for water conservation in new developments. It takes its role in leading the city towards achieving a sustainable water supply/demand balance very seriously.

The Jubilee Library, the result of a major Private Finance Initiative project run by the council, is one of the most resource efficient public buildings in the UK. It houses a complex rainwater harvesting and storage system which supplies water to the toilets and the cleaners sinks, and ensures that calls for water supply will draw first from rainwater supplies rather than the mains supply.

The annual sustainability conference, hosted by the council in Hove Town Hall in April 2006 was themed “Water shortage – the ‘here and now’ climate change issue”. The aim of the conference was to alert the city to the seriousness of the water shortage crisis. Over 150 delegates attended the conference, representing a wide variety of businesses, organisations, and public/voluntary sector groups from across the city.

An Energy & Water Manager has been employed at the council to co-ordinate and implement the council’s energy efficiency and water management service with the aim of maximising environmental and financial benefits. The creation of this post was a key action from the council’s climate change action plan.

The City in Bloom floral display was reviewed in 2006 due to the water shortage and the decision was taken to not include those plants or hanging baskets which would require regular watering. Some plants remained outside the wedding registry office in Bartholomew Square, and staff were encouraged to water these with wastewater.

A drought steering group consisting of key officers from across the council has been set up in order to speed up the council's reaction time to the threat and realisation of a drought. From this, a variety of emergency measures in the time of a drought have been put in place and more long-term water saving actions are being investigated.

Aims of the Water Action Plan:

The purpose of this Water Action Plan is to provide strategic direction for improved sustainable water management practices within the city council's own buildings and operations, and to raise the profile of water issues in Brighton & Hove and the wider community.

The council and its partners committed themselves within the 2020 Sustainable Community Strategy to making Brighton & Hove *'a place to live which is clean, attractive, uses energy and natural resources efficiently, reduces pollution, ensures the best use of land, promotes biodiversity, approves well-designed developments and has accessible open space and countryside'*. A major part of this aim involves the management of and reduction in the city's water use.

This management and reduction will be achieved through:

- reducing water consumption and limiting water wastage in council buildings
- implementing water efficient practices in open space management, new development, and existing social housing properties
- educating and raising awareness about water issues and working towards a cultural change in the way that people perceive and use water
- responding to the water challenges brought about by climate change, particularly drought

Those involved in ensuring that these aims are met will be:

- the relevant departments and officers in the council
- the Sustainability Commission
- the Local Strategic Partnership through the 2020 Sustainable Community Strategy, and the proposed Climate Change Strategy for the city.

This action plan and its aims have been developed as a result of ideas produced from the fifth annual Sustainability Conference in April 2006 on "Water Shortage the 'here and now' Climate Change issue". Input from key council officers and departments as well as external partners and stakeholders has been gathered, and wider consultation with the public is planned.

Many of the actions included in this plan have an internal focus towards getting the own councils house in order. However, where possible, the ambition is to engage local communities, businesses, and public and voluntary sector organisations in water management issues.

The targets included in this plan are closely tied in with the Local Development framework, the sustainability planning appraisal document, and the 2020 Sustainable Community Strategy.

Water Efficiency Measures - Monitoring & Reducing Water Use in the Council:

	Objective:	Action:	SMART Target(s):	Lead Officer:	Partners:	Resources:
1.	Centralise water consumption data for all council buildings for monitoring purposes	<ul style="list-style-type: none"> • Compile water consumption database • Produce a definitive list of meters and locations 	<ul style="list-style-type: none"> • Database to be completed by Dec 2007 • List to be completed by Aug 2007 	Energy & Water Manager	All Directorates, Team Q, Southern Water	Staff time, financial cost for service charge from Team Q
2.	Analyse water usage in all council and school buildings	<ul style="list-style-type: none"> • Benchmark all council buildings for water consumption per m/sq and per employee • Benchmark all school buildings for water consumption per pupil 	<ul style="list-style-type: none"> • Benchmarking to be completed by Oct 2007 • Benchmarking to be completed by Oct 2007 	Energy & Water Manager	All Directorates, Team Q, Property & Design, Building Managers	Staff time.
3.	Publish consumption data with recommendations for further actions	<ul style="list-style-type: none"> • Publish an annual water usage report containing consumption data and detailing performance against the benchmarks established in Objective 2 for all council & school buildings 	<ul style="list-style-type: none"> • To publish first annual report by Mar 2008 • To publish annual reports from Mar 2008 onwards 	Energy & Water Manager	All Directorates, TMT, Sustainability Commission	Staff time
4.	Introduce a target for reducing water usage in existing council and school buildings	<ul style="list-style-type: none"> • Investigate existing water consumption targets • Introduce a target 	<ul style="list-style-type: none"> • To have a council target for reducing water usage in all council and school buildings, by Aug 2007 	Energy & Water Manager	Property services	Staff time
5.	Increase the level of metering in all council & school buildings	<ul style="list-style-type: none"> • Identify areas where sub-metering would be beneficial in buildings • Ensure that when refurbishments take place sub-meters are installed in the 	<ul style="list-style-type: none"> • Survey to be completed by Mar 2008 • To be included in the PMB appraisal process by Aug 2008 	Energy & Water Manager	Planning, Property & Design, Building Services, Designers/Engineers	Staff time, PIF budget and departmental budgets

		<p>identified areas through the PMB appraisal process</p> <ul style="list-style-type: none"> • Ensure all new meters have a pulsed output 	<ul style="list-style-type: none"> • From Aug 2008 			
6.	<p>Investigate the potential of covering school pools when not in use</p>	<ul style="list-style-type: none"> • Identify the number of schools with pools and without covers • Investigate the most sustainable options • Introduce covers to all school pools where possible 	<ul style="list-style-type: none"> • By Dec 2007 • By April 2008 • From April 2008 	Energy & Water Manager		Staff time, School budgets
7.	<p>Set a target(s) for Southern Water to respond to reported leaks by, for council & school buildings</p>	<ul style="list-style-type: none"> • Establish with Southern Water a Service Level Agreement • Agree to monitor and report performance annually 	<ul style="list-style-type: none"> • SLA to be established by Dec 2007 • First report to be produced by Apr 2008 	Energy & Water Manager	Southern water, Procurement & Contract Officers.	Staff time
8.	<p>Use the most water efficient equipment when undertaking refurbishments in all council buildings</p>	<ul style="list-style-type: none"> • Include a water efficiency check list in the PMB project assessment process • Include water efficiency in the Procurement Code of Practice • Raise awareness amongst relevant council staff, e.g. suppliers and contractors, and put information on council website • Monitor compliance to the water efficiency guidelines in the Procurement code of practice and include in the annual water usage report 	<ul style="list-style-type: none"> • Checklist to be included by Feb 2007 • To be included by Aug 2007 • To be completed by Aug 2007 • Monitoring system set up by April 2007 and include in first annual water usage report in Mar 2008 	Energy & Water Manager, Procurement Officer	Property & Design, Procurement & Contract Officers	Staff time

9.	Develop and implement an optimum standard for all sanitary and kitchen facilities	<ul style="list-style-type: none"> Consult on standard with relevant members of staff Identify the most efficient appliances Implement standard in all new builds 	<ul style="list-style-type: none"> Consultation to be completed by Feb 2007 Appliances to be identified by Aug 2007 Implementation from Dec 2007 	Building Services Manager.	Energy & Water Manager, Property & Design Team, Planning, Architects, Procurement	Staff time
10.	Investigate the potential for incorporating rainwater harvesting systems/rooftop water collection in council buildings and properties	<ul style="list-style-type: none"> Investigate opportunities for water collection Implement where appropriate 	<ul style="list-style-type: none"> By Dec 2007 By Dec 2008 	Energy & Water manager	Property & Design Team, Planning, Architects, Property Services	Staff time, PIF & PMB Budgets
11.	Develop a strategy for reusing swimming pools backwash water	<ul style="list-style-type: none"> Identify feasibility and resources for reusing backwash water for fire rescue service Investigate opportunities to reuse backwash water for seafront cleansing Investigate opportunities to reuse backwash water to flush toilets Implement opportunities where possible 	<ul style="list-style-type: none"> By Dec 2007 By Dec 2007 By Dec 2007 By Dec 2008 			
12.	Review the role of paddling pools and fountains in the city	<ul style="list-style-type: none"> Identify all pools and fountains in the city and their yearly water usage Develop a strategy for switching off/not refilling in times of water shortage 	<ul style="list-style-type: none"> By Dec 2007 By Dec 2008 			

13.	Increase the water efficiency of all public toilets	<ul style="list-style-type: none"> Identify all public toilets in the city and their current yearly water usage Identify options for increasing efficiency and using recycled/grey water/salt water and switching off water supply at night Implement a programme of refurbishment 	<ul style="list-style-type: none"> By Dec 2007 By April 2008 From April 2008 			
14	Improve water management in parks	<ul style="list-style-type: none"> Read all meters in parks monthly Create a database of all meters in parks and analyse the data Review open space planting and maintenance with the aim of minimising water use 	<ul style="list-style-type: none"> From April 2007 By Dec 2007 By Dec 2007 		Energy & Water manager, Team Q, City Parks	Staff time, financial cost for service charge from Team Q
15.	Use seawater in jets to clean roads, offensive graffiti etc.	<ul style="list-style-type: none"> Investigate the feasibility of using seawater Where possible implement such measures in all related council operations 	<ul style="list-style-type: none"> 	Seafront Office		
16.	Improve the water infrastructure on allotments	<ul style="list-style-type: none"> Undertake a survey of the water infrastructure Carry out repairs and replacement work of any damaged or leaking water pipes 	<ul style="list-style-type: none"> By April 2007 By Dec 2007 			

Water Efficiency Practices in Open Space Management, New Developments, & Social Housing:

	Objective:	Action:	SMART Target(s):	Lead Officer:	Partners:	Resources:
17.	Deliver water efficiency recommendations through the Local Development Framework (LDF)	<ul style="list-style-type: none"> • Provide information, guidance and targets on water efficiency in the sustainable buildings & construction SPD (Sustainable Planning Document) • Include a policy on water efficiency in the SPD for: new buildings, conversions and extensions. • Publication of SPD • Ensure that the performance of the SPD is monitored 	<ul style="list-style-type: none"> • SPD To be published in April 2008¹ • Aim for BREEAM 'excellent' on all new residential developments over 10 units/1000m² • All new residential developments under 10 units/1000m² to achieve BRE 'very good' in the water efficiency section • All new schools and community buildings to achieve BRE 'excellent' in the water efficiency section • All new offices & retail developments to achieve the following benchmark: 2m³/employess per day or, 0.2m³/m²/yr • All new hotels to 	Sustainability Appraisal Officer	City Planning, Environment Agency	Staff time, LDF resources

¹ Please Note all Targets for this objective are currently recommendations in the draft SPD. This document is due to go out to consultation in May 2007 but will not be approved and published until April 2008. There is a possibility in the light of consultation on the SPD that these targets will need to be amended.

			<p>have... Anne Hugh White to confirm</p> <ul style="list-style-type: none"> Performance measures to be put in place after publication of SPD in April 2008 			
18.	<p>Introduce targets for the use of Sustainable Urban Drainage Systems (SUDS) through the LDF</p>	<ul style="list-style-type: none"> Include guidance and targets for the use of SUDS in the SPD 	<ul style="list-style-type: none"> All new developments 10 units or 1000m2 will be expected to provide landscaping schemes and to incorporate SUDS into the design more research needed Anne will confirm SPD to be published in April 2008 	Sustainability Appraisal Officer	City Planning, Environment Agency	staff time, LDF resources
19.	<p>Reduce the amount of mains water used in council housing properties</p>	<ul style="list-style-type: none"> Implement the water use reduction section in the Housing Repairs & Maintenance Sustainability Building Guidance 	<ul style="list-style-type: none"> Reduce total annual mains water use by 2,215,200 litres by April 2007 Reduce total annual mains water use by 6,091,800 litres by April 2008 Progress to be reported twice a year 	Housing Asset & Sustainability Manager	Brighton & Hove City Housing	Staff time, Capital Programme
20.	<p>Ensure works to be carried out with Houses Renewal Assistance and Housing Act notices where possible, install water efficient devices</p>	<ul style="list-style-type: none"> Review and amend relevant specifications to recommend water efficiency measures 	<ul style="list-style-type: none"> Review to be complete by April 2008 	Housing Sustainability Project Manager	Housing Sustainability Project Team, Energy & Water Manager, Sustainability Team	Staff time

21.	Ensure adaptation works to be carried out on council properties where possible, install water efficient devices	<ul style="list-style-type: none"> Review and amend relevant specifications to recommend water efficiency measures 	<ul style="list-style-type: none"> Review to be complete by April 2008 	Housing Sustainability Project Manager	Housing Sustainability Project Manager, Housing Asset & Sustainability Manager	Staff time
22.	Ensure disabled adaptation works to be carried out under the disabled Facilities Grants where possible, install water efficient devices	<ul style="list-style-type: none"> Review and amend relevant specifications to recommend water efficiency measures 	<ul style="list-style-type: none"> Review to be complete by April 2008 	Housing Sustainability Project Manager	Brighton & Hove City Housing	Staff time
23.	Promote water efficiency measures to registered Social Landlords	<ul style="list-style-type: none"> Provide information on water efficiency measures to Registered Social Landlords 	<ul style="list-style-type: none"> By April 2008 	Housing Sustainability Project Manager	Brighton & Hove City Housing	Staff time
24.	Encourage the installation of water butts and SUDS in maintenance work in social housing	<ul style="list-style-type: none"> As detailed in the Housing Repairs & Maintenance Sustainability Building Guidance, where possible, water butts and SUDS will be incorporated into any planned maintenance work. 	<ul style="list-style-type: none"> Progress to be reported twice a year 	Housing Asset & Sustainability Manager	Housing Repairs & Maintenance	NB: The success of this objective is dependent on the availability of funding and flexibility in housing budgets
25.	Investigate the opportunity of small grants for water saving devices	<ul style="list-style-type: none"> Review Housing Renewal Policy and include 	<ul style="list-style-type: none"> Review to be completed by April 2008 	Housing Sustainability Project Manager	Brighton & Hove City Housing	Staff time
26.	Increase the number of water meters used by low income families	<ul style="list-style-type: none"> Undertake a local research study into the benefits of water meters for low income families Engage local residents in a water meter uptake scheme 	<ul style="list-style-type: none"> Study to be completed by ? Number of water meters in the city to be increased by ? by ? 		This is something that BHCC Housing also need to investigate so would look to be part of any future study	

Educating & Raising Awareness about Water Issues:

	Objective:	Action:	SMART Target(s):	Lead Officer:	Partners:	Resources:
27.	Provide council employees with information and advice on how to reduce water use in the office	<ul style="list-style-type: none"> Put information on the council website and intranet Include information in induction training/e-induction Produce a guide on how to reduce water use in the office 	<ul style="list-style-type: none"> By Dec 2007 By Dec 2007 By Dec 2007 	Sustainability Co-ordinator	Energy & Water Manager	Staff time, & some financial costs
28.	Run an internal campaign to reduce water use in council offices	<ul style="list-style-type: none"> Make water reduction a key part of the Environment Champions Scheme across the council Put up water saving signs in council buildings and facilities Include water reduction measures in sustainability section of team plans Put on a SACC event with a focus on water 	<ul style="list-style-type: none"> By April 2007 By Dec 2007 By April 2007 By Aug 2007 	Sustainability Co-ordinator	Energy & Water Manager	Staff time, & some financial costs
29.	Encourage schools to reduce their water use	<ul style="list-style-type: none"> Promote water saving as part of the environmental education programme Work with caretakers and building managers to undertake water audits and implement efficiency measures 	<ul style="list-style-type: none"> Increase number of schools awarded Eco-status year on year 		Southern Water, Energy & Water Manager	Staff time, schools budget

30.	Provide canteen and restaurant staff with information and advice on how to reduce their water use	<ul style="list-style-type: none"> • Produce a guide on how to reduce water use in kitchens/canteens • Encourage the use of tap water at all council events by including the option to order tap water on the yes dining order form 	<ul style="list-style-type: none"> • 	Head of Sustainability & Environmental Policy	Energy & Water Manager, Sustainability Co-ordinator	Staff time
31.	Promote the Water Action Plan	<ul style="list-style-type: none"> • Consult with relevant council employees on the development of the plan • Launch the plan to all council employees • Publicise the plan amongst the council's partners • Publicise the plan to the public 	<ul style="list-style-type: none"> • By April 2007 • By Aug 2007 • By Aug 2007 • By Aug 2007 	Head of Sustainability & Environmental Policy	Energy & Water Manager, All Directorates	Staff time
32.	Provide training to Planning officers on water efficiency	<ul style="list-style-type: none"> • Provide a workshop for all Planning officers on water efficiency and the planning system 	<ul style="list-style-type: none"> • Before SPD published in 2008 	Sustainability Appraisal Officer	Sustainability officer, Energy & Water Manager	Staff time
33.	Liquid future project: An environmental art project designed to raise awareness re: water use amongst the public	<ul style="list-style-type: none"> • Find a suitable location and participants for the project • Install • Review 	<ul style="list-style-type: none"> • 			
34.	Work with Community Development Workers to promote water reduction in local communities	<ul style="list-style-type: none"> • Set up a series of water reduction projects • Build in targets for reducing water use into neighbourhood action plans (NAP) 	<ul style="list-style-type: none"> • 	Head of Sustainability & Environmental Policy	Community development Workers	Staff time & some financial costs

35.	Run a campaign to encourage a reduction in water use amongst the public/businesses	<ul style="list-style-type: none"> • Issue regular press releases on the water situation in B&H • Issue regular press releases on how to save water • Put together an exhibition on water saving for the local libraries • Hold a workshop for local businesses on how to save water 	•	Head of Sustainability & Environmental Policy	Argus, Press Team, Southern Water, Environment Agency, BHEP	Staff time, financial costs of exhibition and running a workshop
36.	Work with local bus, train, taxi companies, & construction site managers to conserve & recycle water.	<ul style="list-style-type: none"> • Run a workshop for relevant companies and organisations on water saving techniques & technologies 	•	Head of Sustainability & Environmental Policy	Energy & Water Manager	Staff time, financial costs of exhibition and running a workshop

Responding to the Water Challenges Brought About by Climate Change:

	Objective:	Action:	SMART Target(s):	Lead Officer:	Partners:	Resources:
37.	Take a lead in the city in the event of a Drought Order being actioned.	<ul style="list-style-type: none"> • Develop a plan of action with the Drought Steering Group • Issue a statement to the public • Seek exemption from the order where absolutely necessary 	•	Head of Sustainability & Environmental Policy	Drought Steering Group	

38.	Promote the planting of drought resistant species	<ul style="list-style-type: none"> • Access the councils involvement in City in Bloom • Identify prominent public spaces to create drought gardens • Ensure all council owned green areas are assessed for water requirements and drought resistance species planted 	<ul style="list-style-type: none"> • Assessment to take place on a year on year basis • By April 2008 • By April 2008 	Parks and Open spaces		
39.	Ensure ponds are not unnecessarily refilled during times of water shortage	<ul style="list-style-type: none"> • Resist calls to fill ponds with water particularly during periods of drought • Produce an inventory of council ponds for the fire service and others • Clear communication to public as to why etc... 	<ul style="list-style-type: none"> • 	Countryside	Animal Welfare, City parks, Fire Service, Southern Water, RSPCA, Community Groups	Staff time (Countryside ranger)
40.	Restrict washing of council vehicles to only those required for H&S reasons	<ul style="list-style-type: none"> • Assess vehicle fleet and identify those vehicles which must be washed for H&S reasons • Identify sustainable water sources to wash vehicles with 	<ul style="list-style-type: none"> • 	Fleet Manager	City Parks, Seafront	
41.	Reduce the risk of flooding from storm water	<ul style="list-style-type: none"> • Ensure storm water issues are addressed as part of the Download initiative • Establish green roofs in areas of the city at risk of storm floods through the LDF 	<ul style="list-style-type: none"> • 			
42.	Minimise new building in flood risk areas	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	City planning	Environment Agency, Southern Water	