

## 1. Introduction

In accordance with Regulation 35 of the Local Government Pension Scheme (Administration) Regulations 2008 and the guidance paper issued in March 2004 by the Chartered Institute of Public Finance and Accountancy (CIPFA) Pensions Panel this statement sets out the funding strategy for the Environment Agency Active Pension Fund (the "Fund"). This statement has been reviewed and updated as part of the 2010 actuarial valuation process.

The Active Fund is part of the Local Government Pension Scheme (LGPS) and was established as the National Rivers Authority Pension Fund in 1989 at the time of the privatisation of the water industry in England and Wales. The Fund inherited active members' accrued liabilities from the predecessor pension arrangements, but no pensioners or deferred pensioner liabilities. In 1996 it transferred to the Environment Agency and became the Environment Agency Active Pension Fund. Since then, the Fund has been gradually maturing.

A separate Closed Fund, which is guaranteed by the Department for the Environment, Food and Rural Affairs, exists for pensioners and deferred pensioners that did not transfer to one of the privatised water companies' pension schemes in 1989. The Closed Fund has its own Funding Strategy Statement.

As at 31 March 2010, the Active Fund contained 11,933 active members, 4,089 pensioners and 5,215 deferred pension members whose benefits have yet to come into payment.

Unlike typical LGPS funds, the Active Fund only has a single participant employer – the Environment Agency.

Regulation 35 of the respective legislation referred to above provides the statutory framework from which the Administering Authority is required to prepare and review a Funding Strategy Statement ("FSS"). The key requirements for preparing the FSS can be summarised as follows:

- After consultation with all relevant interested parties involved with the Active Fund the Administering Authority will prepare and publish their funding strategy;
- In preparing the FSS, the Administering Authority must have regard to:
  - the guidance issued by CIPFA for this purpose; and
  - the Statement of Investment Principles (SIP) for the Fund published under Regulation 12 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009 (as amended).
- The FSS must be revised and published whenever there is a material change in either the policy on the matters set out in the FSS or the Statement of Investment Principles.

The Fund is a defined benefit final salary scheme under which the benefits are specified in the governing legislation (the Regulations). "The Regulations" are defined as:

- The Local Government Pension Scheme (Administration) Regulations 2008 (as amended) – "the Administration Regulations";
- The Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as amended) – "the Benefit Regulations";
- The Local Government Pension Scheme (Transitional Provisions) Regulations 2008 (as amended) – "the Transitional Regulations"; and
- The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009 (as amended) – "the Investment Regulations".

Benefits payable under the Fund are guaranteed by statute and thereby the pensions promise is secure. The required levels of employee contributions are also specified in the Regulations.

The Environment Agency, as the employer, pays the balance of the cost of delivering the benefits to members. Contributions payable by the Environment Agency as the Employer are determined in accordance with the Regulations (principally Regulation 36 of the Administration Regulations) which require that the actuary completes an actuarial valuation, including a rates and adjustments certificate, every three years. Contributions to the Active Fund should be set so as to “secure its solvency”, whilst the actuary must also have regard to the desirability of maintaining as nearly constant a rate of contribution as possible.

Following the 2010 actuarial valuation, and subject to ministerial approval, the cost of the scheme will be potentially shared between the employer and employees as part of a locally applied national LGPS ‘cap and share’ arrangement introduced under Regulation 36A of the Local Government Pension Scheme (Administration) Regulations 2008. However it is not yet clear how the ‘cap and share’ arrangements will work in practice given that:

- the benefits available under public service schemes such as the LGPS are likely to be subject to reform as part of the Hutton Review; and
- the Chancellor of the Exchequer’s announcement in the 2010 Spending Review that contributions payable by employees to public service pension schemes are to be increased over the next three years.

The interaction of ‘cap and share’ with the aims of the Hutton Review and the 2010 Spending Review should become clearer during 2011. The FSS does not make any allowance for these changes.

The FSS focuses on the pace at which these liabilities are funded, whilst at the same time, facilitating scrutiny and accountability through improved transparency and disclosure. The actuary must have regard to the FSS in carrying out the valuation.

## **2. Purpose of the FSS in policy terms**

Funding is the making of advance provision to meet the cost of accruing benefit promises. Decisions taken regarding the approach to funding will therefore determine the rate or pace at which this advance provision is made. Although the Regulations specify the fundamental principles on which funding contributions should be assessed, implementation of the funding strategy is the responsibility of the Environment Agency Pensions Committee as the Administering Authority, acting on the professional advice provided by the actuary.

The purpose of this Funding Strategy Statement is to:

- establish a clear and transparent fund-specific strategy which will identify how the Environment Agency’s employer pension liabilities are best met going forward;
- support the regulatory requirement to maintain as near constant employer contribution rates for the Environment Agency as employer as possible; and
- take a prudent longer-term view of funding those liabilities.

These objectives are desirable individually, but not necessarily deliverable together.

In developing this strategy which is intended to be both cohesive and comprehensive, the Environment Agency Pensions Committee as the Administering Authority has focused on balancing the desirability of affordability of contributions, transparency of processes, stability of the employer’s contributions, and prudence in the funding basis.

## **3. Aims and purpose of the Pension Fund**

The aims of the fund are to:

- ensure that sufficient resources are available to meet all benefits as they fall due for payment;
- recover any shortfall in assets, relative to the value of accrued liabilities, over broadly the future working lifetime of current employees;
- enable the Environment Agency’s employer contributions to be kept as stable as possible and at reasonable cost to the Environment Agency;
- manage the Environment Agency’s, as the employer, liabilities effectively; and
- maximise the returns from investments within reasonable risk parameters.

The **purpose** of the fund is to:

- receive monies in respect of contributions, transfer values and investment income; and
- pay out monies in respect of Fund benefits, transfer values, costs, charges and expenses;

as defined in the Regulations.

#### **4. Responsibilities of the key parties**

These are as set out in the Regulations as amended from time to time.

**The Environment Agency Pensions Committee as the Administering Authority** should:

- collect employer and employee contributions;
- invest surplus monies in accordance with the Regulations;
- ensure that cash is available to meet liabilities as and when they fall due;
- exercise discretions within the regulatory framework;
- manage the valuation process in consultation with the actuary;
- prepare and maintain an FSS and a SIP, both after due consultation with interested parties; and
- monitor all aspects of the Fund's performance and funding and amend the FSS/SIP as necessary.

**The Environment Agency as the Employer** should:

- deduct contributions from employees' pay correctly;
- pay all contributions to the fund, including their own as determined by the actuary, promptly by the due date;
- make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of pension benefits, and early retirement strain costs;
- notify the Administering Authority promptly of all changes to membership or, as may be proposed, which affect future funding; and
- exercise discretions within the regulatory framework.

**The Fund actuary** should:

- prepare valuations including the setting of the employer's contribution rates after agreeing assumptions with the Administering Authority and having regard to the FSS;
- prepare advice and calculations in connection with bulk transfers and individual benefit-related matters; and
- advise on funding strategy, the preparation of the FSS, and the interrelationship between the FSS and the SIP.

#### **5. Long-term funding**

When considering the adequacy of funding, the primary focus of the Pension Committee should be on the long-term because:

- liabilities are paid over a long period, rather than crystallising on a single day;
- market prices of assets with growth potential can be volatile;
- pension liabilities are significant compared to the employer's payroll; and
- cuts in employer contributions are easy to implement, but very slow to reverse.

To meet the requirements of the Regulations the Administering Authority's long term funding objective is to achieve and then maintain assets equal to at least 100% or more of the present value of projected accrued liabilities, assessed on an ongoing basis including allowance for projected final pay. The Administering Authority, after taking advice from the Fund actuary, uses 'stochastic' modelling techniques to project future asset and liability values forward from the valuation date to assess the likelihood that this long-term funding objective will be met.

#### **Funding levers**

The Administering Authority, in conjunction with the Fund actuary, reviewed the Fund's funding strategy in the early part of 2010. The review identified a number of possible funding levers that could be used to refine the funding strategy at the 2010 valuation. The following table shows the funding levers that the Active Fund has adopted for the 2010 actuarial valuation.

<b>Funding Lever</b>	
1	Reduced level of assumed future pay growth (over long term) at maximum of RPI + 1% pa (0.5% pa reduction from 2007 assumptions). Set to 1% p.a. for first two years only.
2	Change derivation of pension increase assumption to allow for benefits being linked to CPI rather than RPI (deduct 0.5% p.a. from market derived RPI figure).
3	Change derivation of pension increase assumption to allow for inflation risk premium by deducting 0.3% p.a. from CPI-linked assumption.
4	Tailor baseline longevity assumptions to particular characteristics of Fund members, using pay levels and postcode based influence indicators.
5	Larger reserve for longevity improvements by moving from 'Original 92 Series' to 'Medium Cohort' with 1% p.a. minimum underpin. This increases average future life expectancies at age 65 by around 1½ years for current pensioners and by around 2 years for future pensioners.
6	Increase average age of retirements for active members aged around 50 or less who have no Rule of 85 protections.
7	Increase allowance for converting pension to cash lump sum (commutation) up to HMRC limits at retirement from 25% to 50%.
8	Stabilise employer contributions by limit on annual changes in employer contributions of +/-0.5% of pay from April 2014 (hereafter referred to as the "contribution stability overlay").
9	To complement the contribution stability overlay, include a safety check at each future actuarial valuation to ensure that the probability that the stabilised contributions will be sufficient to achieve a funding level on the ongoing basis of above 100% in 21 years (equivalent to seven actuarial valuations) is at least two in three or 67%. If this test is not passed, the contribution stability overlay would be switched off.
10	Introduce an annual check on the impact of pay awards on the value of accrued liabilities, compared to assumptions made at the most recent actuarial valuation. The Environment Agency will be able to pay additional top-up contributions at its discretion.
11	In order to protect against the risk of a reducing payroll delaying the deficit recovery plan, the employer's contributions have been re-expressed such that that the future service element depends on a percentage of payroll and the past service deficit recovery element is covered by fixed monetary amounts.

### Key assumptions

The key assumptions making up the funding strategy and as adopted for the 2010 actuarial valuation are:

	<b>31 March 2010</b>
<b>Past Service (Current Yields Basis)</b>	
Asset Valuation	£1,589m
Asset out-performance assumption (pre retirement)	1.6%
Asset out-performance assumption (post retirement)	1.6%
Discount rate (pre retirement)	6.1%
Discount rate (post retirement)	6.1%
Breakeven Retail Price Inflation (RPI)	3.8%
Pension Increases *	3.0%
Earnings Inflation **	4.8%
<b>Future Service (Current Yields Basis)</b>	
Discount rate (pre retirement)	6.1%
Discount rate (post retirement)	6.1%
Breakeven Retail Price Inflation (RPI)	3.0%
Earnings Inflation **	4.8%

\* based on breakeven RPI less 0.5% pa (following the Government's announcement in June 2010 that future pension increases in the LGPS will be based on the Consumer Prices Index rather than on RPI) less 0.3% pa (the premium that investors are prepared to pay for inflation protection in current bond markets).

\*\* 1% pa in the first two years and 4.8% pa thereafter, with an allowance for age-related promotional increases currently worth around 1.2% pa made in addition.

Underlying these assumptions are the following two tenets:

- that the Active Fund and the Environment Agency are expected to continue for the foreseeable future; and
- favourable investment performance can play a valuable role in achieving adequate funding over the longer term.

The way in which longevity assumptions are set has changed at the 2010 valuation. Instead of relying on a single base table and specific age ratings per class of member, at the 2010 valuation the post retirement mortality base tables are a suite of bespoke assumptions which reflect the characteristics of the Fund membership. These bespoke assumptions are based on pooled experience from occupational pension schemes during the period 2005 to 2007 and allow for observed variations in mortality according to age, gender, salary and postcode based lifestyle group. The assumptions adopted vary according to the individual characteristics of each individual Fund member. The assumptions for 31 March 2010 also incorporate an improvement to mortality figures, over those assumptions used in the 2007 actuarial valuation. The Actuary has allowed for future longevity improvements by using Medium Cohort projections with a 1% p.a. minimum underpin from 2010.

### **Solvency and Target Funding Levels**

The Active Fund's actuary is required to report on the "solvency" of the whole fund at least every three years.

'Solvency' is defined to be the ratio of the market value of assets to the value placed on accrued benefits on the Fund actuary's *ongoing funding basis*. This quantity is known as a funding level.

As at 31 March 2010, the ongoing funding level was 94% and at 31 December 2010 it was estimated to have remained at 94%.

The employer's future service rate will be based upon the cost (in excess of members' contributions) of the benefits which employee members earn from their service each year. Technically these rates will be derived using the *Projected Unit Method* of valuation with a one-year control period.

The funding method is described in the Actuary's report on the valuation.

If future experience is in line with assumptions, and the employer's membership profile remains stable, this rate should be broadly stable over time. If the membership of employees matures (e.g. because of lower recruitment) the rate would rise.

The future service rate includes expenses of administration to the extent that they are borne by the Active Fund and an allowance for benefits payable on death in service and ill health retirement.

The ongoing funding basis is that used for each triennial valuation and the Fund actuary agrees the financial and demographic assumptions to be used for each such valuation with the Administering Authority.

The key financial assumption is the anticipated return on the Fund's investments. The investment return assumption makes an allowance for anticipated returns from equities being in excess of bonds. There is, however, no guarantee that equities will out-perform bonds but historical data demonstrates that over the long-term returns from investing in equities tend to be greater than those from investing in bonds. When returns are measured over short periods such as the three years between formal actuarial valuations, actual returns and assumed returns can deviate sharply.

Given the very long-term nature of the liabilities, a long-term view of prospective returns from equities is taken. For the 2007 valuation, it is assumed that the Fund's assets will, over the long-term, deliver an average additional return of 1.6% a year in excess of the return available from investing in index-linked government bonds at the time of the valuation.

The retail price inflation assumption is taken to be "break-even" inflation i.e. the level of future inflation that would give an investor in a conventional (non-inflation protected) gilt the same return as another who invested in an index-linked gilt. The pension increase assumption is based on break-even inflation, but reduced by 0.5% a year to allow for consumer price inflation and by a further 0.3% a year to allow for the inflation risk premium (the premium that investors are prepared to pay for inflation protection in current gilt markets).

The assumptions are described in the Actuary's report on the valuation.

## Derivation of Employer Contributions (before stability overlay)

The Environment Agency's contributions as the Employer are normally made up of two elements:

- the estimated cost of future benefits being accrued, referred to as the “*future service rate*”; plus
- an adjustment for the funding position (or “*solvency*”) of accrued benefits relative to the Fund’s solvency target, “*past service adjustment*”. If there is a surplus there may be a contribution reduction; if a deficit a contribution addition, with the surplus or deficit spread over the remaining working lifetime of scheme members (calculated to be 9 years at the 2010 actuarial valuation).

The Fund’s actuary is required by the regulations to report the *Common Contribution Rate*, for the Environment Agency as the Employer at each triennial valuation. It combines both of the items above and is expressed as a percentage of pay.

The Environment Agency is paying 16.5% of pay in 2010/11. The 2010 valuation delivered a very similar result and the Active Fund’s actuary recommended that contributions at the current level should continue. However, given the uncertainties about the size of the Environment Agency’s payroll in future, it was further recommended that the elements relating to future accruals and to deficit recovery be separated into two parts:

- (a) 13% of pensionable pay for future accruals; and
- (b) £12m a year, or £1m a month for deficit recovery. The latter element would be increased in April 2012 and April 2013 to allow for the increases to pensionable pay which had been assumed in the actuarial valuation to £12.12m and £12.70m.

## Sensitivity to assumptions

The table below illustrates the effect on the value of the liabilities if each of the assumptions shown was to vary by +/- 0.5% per annum.

Financial Assumption	Effect on value of liabilities of varying assumption by			
	+ 0.5% p.a.		-0.5% p.a.	
	Past Service Liabilities	Future Service Liabilities	Past Service Liabilities	Future Service Liabilities
Discount Rate	-11%	-13%	+11%	+13%
Pension increases	+7%	+7%	-7%	-7%
Salary Growth	+4%	+5%	-4%	-5%

It should be noted that the figures above consider the change to each assumption in isolation i.e. a reduction of 0.5% to the discount rate will increase the past service liabilities by approximately 11%, assuming the inflation and salary growth assumptions remain unchanged.

With regard to demographic sensitivities:

- each extra 100 early leavers (i.e. employees who became deferred pensioners) over and above that assumed in the valuation (approximately 1,000 per year), would be expected to reduce the value of the accrued liabilities by between £1m and £1.5m, equivalent to 0.1% to 0.15% of the active liabilities;
- each additional year of life expectancy adds approximately 3% to the value of accrued liabilities. The reserving basis includes an allowance of approximately 7% (or £117m) for future longevity improvement;
- there is allowance for approximately 50 ill-health retirements each year, at a cost in the contribution rate of approximately 2-3% of pay; and
- non-ill health early retirements have a neutral effect on funding as there is either a reduction to the member’s pension or an extra employer contribution.

## **Stability of Employer Contributions**

A key challenge for the Administering Authority is to balance the need for stable, affordable employer contributions with the requirement to take a prudent, long term view of funding and ensure the solvency of the Active Fund. With this in mind, there are a number of prudent strategies that the Administering Authority may deploy in order to maintain employer contribution rates at as nearly a constant rate as possible. These include:

- the use of extended deficit recovery periods;
- the phasing in of contribution increases/decreases; and
- capping of employer contribution rate increases/decreases within a pre-determined range (“the contribution stability overlay”).

### **Contribution stability overlay**

There can be occasions when, despite the deployment of contribution stabilising mechanisms such as phasing and the extension of deficit recovery periods, the theoretical employer contribution rate is not affordable or achievable. This can occur in times of tight fiscal control or where budgets have been set in advance of new employer contribution rates being available.

In view of this possibility, the Administering Authority commissioned the Fund Actuary to carry out extensive modeling to explore the long term effect on the Fund of capping future contribution increases. The results of this modeling indicate that it is justifiable to limit annual changes to contributions payable by the Environment Agency, as employer, to no more than +0.5% / -0.5% of pay from 1 April 2014.

In the interests of stability and affordability of the Environment Agency’s contributions, the Administering Authority, on the advice of the Active Fund Actuary, believes that the results of the modeling demonstrate that stabilising contributions can be viewed as a prudent longer-term approach. In addition, as the theoretical rate at the 2010 valuation is below the minimum contribution rate of 16.5% of pay that is currently payable to the Fund by the Environment Agency as the Employer, the Administering Authority has agreed that the current level of contributions should be maintained for financial years 2011/12, 2012/13 and 2013/14 until the results of the 2013 valuation are available.

The Active Fund currently has a strong net cash inflow and can therefore take a medium to long term view on determining employer contribution rates to meet future liabilities through operating a fund with an investment strategy that reflects this long term view. It allows short term investment markets volatility to be managed so as not to cause volatility in employer contribution rates. The LGPS Regulations require the longer-term funding objectives to be achieved and the Fund to maintain assets to meet the projected accrued liabilities. The role of the Active Fund Actuary in performing the necessary calculations and determining the key assumptions used is an important feature in determining the funding requirements.

## **Funding for Early Retirement**

### **Non Ill health retirements**

The actuary’s funding basis makes no allowance for premature retirement except on grounds of ill health. The Environment Agency, as the Employer, is required to pay a lump sum contribution whenever an employee retires before attaining the age at which the valuation assumes that benefits are payable.

Employees who joined before 1 October 2006 (and are subject to Rule of 85 protections on their pre April 2008 benefits) but reach age 60 after 31 March 2020, plus all employees who joined after 1 October 2006, are assumed to take all of their benefits at age 65. Otherwise it is assumed that members’ benefits on age retirement are payable from the earliest age that the employee could retire without incurring a reduction to their benefit and without requiring their employer’s consent to retire.

The additional costs of premature retirement are calculated by reference to these ages. The Environment Agency, as the Employer, is required to meet all costs of early retirement strain caused by early retirements other than on the grounds of ill health by immediate capital payments into the Fund.

### **Ill health monitoring**

The Fund monitors the Environment Agency’s employees’ ill health experience on an ongoing basis. If the cumulative number of ill health retirements in any financial year exceeds the allowance at the previous valuation, the Environment Agency, as the Employer, may, after the Environment Agency’s Pensions

Committee (the Administering Authority) has consulted with the actuary, be charged additional contributions on the same basis as apply for non ill-health cases.

### **New employers participating in the Fund**

Unlike most other LGPS funds, the Fund currently has only a single employer. It is however possible that more than one employer will participate in the Fund in future. There are a number of ways in which new bodies can participate in the LGPS such as a scheduled body or an admission body.

In general, the following principles will apply when a new employer enters the Fund:

- starting assets and liabilities will be notionally ring-fenced within the Fund and the funding level of the new employer tracked over time based on its own experience, cash flows in and out and membership movements;
- the new employer will have its own individual contribution rate separate from any other employer in the Fund and based on its own membership profile, with a surplus/deficit spreading period no greater than the average future working lifetime of its active employees;
- any deficit left behind if past service benefits are transferred from a ceding employer in the Fund to the new employer as result of a fully funded transfer should be met via either an up-front capital payment or over a suitable spreading period, which should be no longer than that applied to the Environment Agency, as agreed with the paying body;
- any deficit that the new body inherits at commencement (e.g. as a result of a “share of fund” transfer from another employer within or outside the Fund) would be expected to be met via an up-front capital payment from the new employer or over some suitable spreading period, which should be no longer than that applied to the Environment Agency;
- any deficit left behind if the new employer ceases in the Fund at a later date should normally be met by a capital payment at point of departure. The assumptions used to carry out the cessation valuation will depend on the reason for departure but typically if the departure is unexpected (e.g. due to insolvency or abolition of the employer) then more conservative assumptions than those used for ongoing funding purposes would be used in order to provide some protection to other employers left within the Fund; and
- the calculation of all up-front capital payments are based on market conditions at the date that the new employer joins the Fund (i.e. the vesting or transfer date) or leaves the Fund in the case of cessations, with payment due from the paying body as soon as sufficient information is available to fully identify all affected members and the associated assets and past service liabilities.

The extent to which these principles will apply will depend on the individual circumstances of the new employer. For example, the Fund will take into account the type of new body (e.g. admission or scheduled body), whether or not it is closed or open to new entrants, its financial covenant and the existence of any Crown guarantee. The Fund will also refer to its policy on the participation of new admission bodies and bulk transfers when agreeing its entry requirements.

## **6. Link to investment policy set out in the Statement of Investment Principles**

Funding and investment strategies are inextricably linked.

In assessing the value of the Active Fund’s liabilities in the valuation, allowance has been made for asset out-performance as described in Section 5, taking into account the investment strategy adopted by the Active Fund, as set out in the SIP.

It is not possible to construct a portfolio of investments which produces a stream of income exactly matching the expected liability outgo. However, it is possible to construct a portfolio that closely matches the liabilities and represents the least risk investment position. Such a portfolio would consist of a mixture of long-term index-linked gilts.

Investment of the Active Fund’s assets in line with the least risk portfolio would minimise fluctuations in the Active Fund’s ongoing funding level between successive actuarial valuations.

If, at the valuation date, the Active Fund had been invested in this portfolio, then in carrying out the valuation it would not be appropriate to make any allowance for out-performance of the investments. On this basis of assessment, the assessed value of the Active Fund’s liabilities at the 2010 valuation would have been significantly higher and the declared funding level would be correspondingly lower.

Departure from a least risk investment strategy, in particular to include equity investments, gives the prospect that out-performance by the assets will, over time, reduce the contribution requirements. The funding target might in practice therefore be achieved by a range of combinations of funding plan, investment strategy and investment performance.

The Administering Authority has adopted a benchmark, which sets the proportion of the Active Fund's assets to be invested in key asset classes. This is set out in the SIP and shown below:

Asset Class	Benchmark Index	Current Strategic Benchmark Holding	Actuary's Best Estimate Long-Term Return from asset class <sup>1</sup> (in excess of gilts returns) %pa
UK Equities	FTSE All Share Index	31.5%	4.3%
Overseas Equities	FTSE World ex UK	31.5%	4.0%
Index-Linked Gilts	FTSE Over 5 Year Index-Linked Gilts	13.5%	-
Corporate Bonds	iBoxx Sterling all non-gilt index	13.5%	2.2%
Private Equity	Absolute Return	5.0%	5.5%
Property	IPD Monthly	5.0%	2.2%
Total		100%	3.3%

The Active Fund's benchmark includes significant allocations to equities and property in the pursuit of long-term returns higher than those from investing in just index-linked gilts. It is the Administering Authority's belief that this strategy will, in the long term, result in a better-funded and more affordable scheme.

The Active Fund actuary's current *best estimate* of the long-term return from equities is around 3% a year in excess of the return available from investing in index-linked government bonds.

In order to reduce the volatility of employers' contributions, the funding policy currently anticipates returns of 1.6% a year, that is around 1.7% a year less than the *best estimate* return from the Active Fund's portfolio of assets (if no active manager out-performance is achieved).

In this way, the employer contributions anticipate returns from Active Fund assets which in the Fund actuary's opinion there is a better than 50:50 chance of delivering over the long-term (measured over periods in excess of 20 years). The Active Fund has set its investment managers performance targets so that the overall target return for the Active Fund is +0.9% per annum greater than the return on the strategic benchmark, after allowing for the active managers' fees. This target return is expected, in the medium to long term, to result in a better-funded and more affordable scheme.

However in the short term, such as the three yearly assessments at formal valuations, there is the scope for considerable volatility and there is a material chance that in the short term and even medium term, asset returns will fall short of this target. The stability measures described in Section 5 will dampen down, but not remove, the effect on employer's contributions.

The Active Fund does not hold a contingency reserve to protect it against the volatility of equity investments.

### Balance between risk and reward

In setting the investment strategy, the Environment Agency's Pensions Committee, as the Administering Authority, considered the balance between risk and reward by altering the level of investment in potentially higher yielding, but more volatile, asset classes such as equities. This process was informed by the use of Asset-Liability techniques to model the range of potential future funding levels and the impact on future contribution rates.

### Intervaluation Monitoring of Funding Position

The Administering Authority monitors investment performance relative to the change in the value of liabilities by means of quarterly inter-valuation monitoring reports.

<sup>1</sup> Excludes any allowance for active manager out-performance of market.

## 7. Identification of risks and counter-measures

The funding of defined benefits is by its nature uncertain. Funding of the Fund is based on both financial and demographic assumptions. These assumptions are specified in the actuarial valuation report. When actual experience is not in line with the assumptions adopted a surplus or shortfall will emerge at the next actuarial assessment and will require a subsequent contribution adjustment to bring the funding back into line with the target.

The Environment Agency's Pensions Committee, as the Administering Authority, has been advised by the actuary that the greatest risk to the Fund's funding is the investment risk inherent in the predominantly equity based strategy, so that actual asset out-performance between successive valuations could diverge significantly from the overall 1.6% per annum assumed in the long term.

The following key risks have been identified:

### Financial

Risk	Summary of Control Mechanism
Fund assets fail to deliver returns in line with the anticipated returns underpinning the valuation of liabilities over the long-term	Only anticipate long term returns on a relatively prudent basis to reduce risk of under-performing. Analyse progress at three yearly valuations Inter-valuation roll-forward of liabilities between formal valuations on a quarterly basis Contribution stability overlay (from 2013 valuation) will reduce risk of volatile employer contributions .
Inappropriate long-term investment strategy	Set fund-specific benchmark, informed by asset-liability modelling. A mechanism for enabling strategy to be linked to funding level could enable asset outperformance relative to liabilities to be locked in.
Fall in risk-free returns on Government bonds, leading to rise in value placed on liabilities	Inter-valuation monitoring, as above. Some investment in bonds helps to mitigate this risk.
Active investment manager under-performance relative to benchmark	Short-term (quarterly) investment monitoring analyses market performance and managers relative to their index benchmark.
Pay and price inflation significantly more than anticipated	The focus of the actuarial valuation process is on real returns on assets, net of price and pay increases. Inter-valuation monitoring, as above, gives early warning. Some investment in index-linked bonds also helps to mitigate this risk. Investment in other "real" assets (e.g. equities and property) also helps to mitigate risks. New mechanism introduced at 2010 valuation where Environment Agency will additionally top-up contributions if future pay increases are in excess of the 2010 valuation salary increase assumption.
Effect of possible increase in employer's contribution rate on service delivery	Mitigate impact through deficit spreading and introduction of new contribution stability mechanism at 2013 valuation to increase employer's budgeting certainty.

## Demographic

Risk	Summary of Control Mechanism
Pensioners living longer.	Actuary quantifies potential scale of risk associated with continuing improvements in longevity, and identifies separate reserve in the actuarial valuation. The reserve for future longevity improvements was increased in the 2010 actuarial valuation. Fund uses bespoke 'baseline' longevity assumptions, based on the pooled mortality experience of almost 100 large occupational pension schemes, to allow for the individual characteristics of each individual member in the Fund. Club Vita also provides annual monitoring of longevity experience movements, to give an early warning of the adequacy of the reserve for future longevity improvements.
Deteriorating patterns of early retirements	Employers are charged the extra capital cost of non ill health retirements following each individual decision. Employer ill health retirement experience is monitored.

## Regulatory

Risk	Summary of Control Mechanism
Changes to regulations, e.g. more favourable benefits package, potential new entrants to scheme, e.g. part-time employees	The Administering Authority is alert to the potential creation of additional liabilities and administrative difficulties for employers and itself. It considers all consultation papers issued by the CLG and comments where appropriate.
Changes to national pension requirements and/or HM Revenue & Customs rules e.g. effect of abolition of earnings cap for post 1989 entrants from April 2006	It considers all applicable HM Revenue & Customs regulations and pensions legislation.

## Structural Changes in Employer

Risk	Summary of Control Mechanism
Administering Authority unaware of structural changes in the employer's membership (e.g. large fall in employee members, large number of retirements).	The Administering Authority monitors membership movements on a quarterly basis, via a report from the administrator at quarterly meetings. The Actuary may be instructed to consider revising the rates and Adjustments certificate to increase an employer's contributions (under Regulation 38) between triennial valuations. Past service deficit recovery element of the Environment Agency's regular contribution rate to be based on monetary amounts (rather than a percentage of payroll) from April 2011 to protect the Fund against falling payroll.
New employers, Arm's Length Bodies (ALBs) review and bulk transfers in or out may crystallise funding deficits.	Administering Authority will manage this by adherence to Pensions Committee's policies on the participation of new admission bodies and bulk transfers.

## **Governance**

The Environment Agency as the administering authority for the Environment Agency Active Pension Fund has delegated the responsibility and accountability for over seeing all aspects of management of the Active Fund to the Pensions Committee.

The Pensions Committee is made up of fifteen Members - four Environment Agency Board members, four executive management members, five trade union nominated members, a deferred member and a pensioner member nominated by the Pensions Committee.

The Pensions Committee meets 4 times a year and has set up a Benefits Group which meet 4 times a year to advise the Pensions Committee on LGPS regulatory changes and benefits administration and Investment Sub-Group to advise the Pensions Committee on the fund and fund managers investment performance.

The Pensions Committee has a Scheme of Delegation to enable the Fund administrator and Environment Agency officers and pension fund administrators to undertake the day-to-day running of the Fund.

## **8. Monitoring and Review**

The Environment Agency's Pensions Committee, as the Administering Authority, has taken advice from the actuary and its investment consultants in preparing this Statement, and has also consulted with the employer.

A full review of this Statement will occur no less frequently than every 3 years, to coincide with completion of a full actuarial valuation. Any review will take account of the current economic conditions and will also reflect any legislative changes.

The Environment Agency's Pensions Committee, as the Administering Authority, will monitor the progress of the funding strategy between full actuarial valuations. If considered appropriate, the funding strategy will be reviewed (other than as part of the triennial valuation process), for example:

- if there has been a significant change in market conditions, and/or deviation in the progress of the funding strategy;
- if there have been significant changes to the Fund membership e.g. as a result of the Government's Arm's Length Body review, or to LGPS benefits e.g. as a result of the Hutton Review;
- if there have been changes to the circumstances of any of the Environment Agency, as the Employer, to such an extent that they impact on or warrant a change in the funding strategy; and
- if there have been any significant special contributions paid into the Fund.

*Approved by the Pensions Committee on 17 March 2011 and will be reviewed in 2013.*