



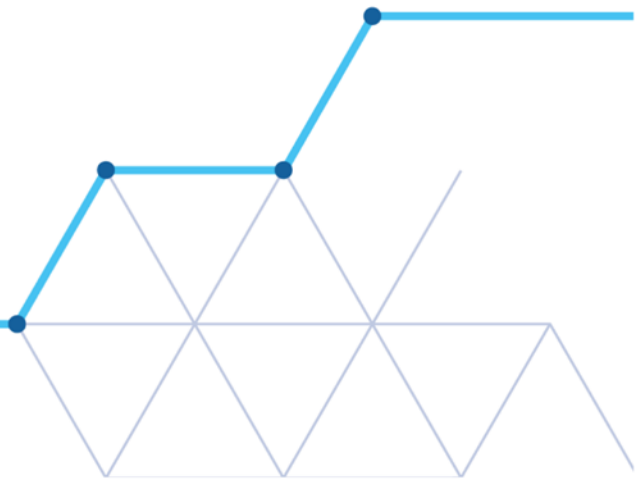
Ministry  
of Justice

# Estates Directorate

## Water Strategy

January 2019

Protecting and advancing the principles of justice



**Version control**

<b>Policy name:</b>	<b>Water Strategy</b>
Version:	V2.2
Date published:	January 2019
Policy owner:	John Cole, Sustainability Team
Authors:	Annie Hollands, Mark Hout
Next review date:	

**Version history**

<b>Version</b>	<b>Date</b>	<b>Reason for change</b>
1.1	August 2018	Original
1.2	December 2018	Update
2.2	January 2019	Update

## Contents

1	Executive Summary	2
2	Introduction and Scope	3
3	Key Drivers and Policy	4
4	Baseline and targets	6
5	Stakeholder Mapping	7
6	Monitoring Ongoing Water Consumption	8
7	Targeting Worst-performing Sites	9
8	Future-proofing the Estate	9
9	Communications	10
10	Economics, Finance & Commercial	10
11	Contact Details	10

---

# 1 Executive Summary

Water is increasingly considered a scarce resource. As part of the Greening Government Commitments, the Ministry of Justice (MoJ) has made a commitment to reduce its water consumption by improving on the 4% reduction in water consumption that was achieved in 2014-2015, measured against the baseline of consumption in 2009-2010. This water strategy is designed to aid the department in delivering on these commitments.

The complexity of the MoJ estate, with varying natures and purposes of each building, means that there can be no simple 'one size fits all' strategy for water management. Analysis shows that the MoJ 'custodial' estate counts for approximately 90% of water use across the entire MoJ estate, so this water strategy encompasses the entire MoJ estate, but prioritises actions to be taken on the **custodial estate**.

The water strategy outlines our ambition to:

- Create **better monitoring of ongoing water consumption**, by:
  - o Setting benchmarks and site-specific targets;
  - o Installing and re-activating smart meters;
  - o Ensuring data is adequately reviewed and providing guidance on best practice;
- **Target the worst-performing sites** on the custodial estate using technical experts to conduct in-depth site visits and provide bespoke recommendations for reducing water consumption;
- **Future-proof the MoJ estate** by ensuring that any new projects or new builds meet the required standards for monitoring and reducing water consumption; and
- Launch a **communications campaign** to educate staff and stakeholders.

## 2 Introduction and Scope

Water is increasingly considered a scarce resource. International and national institutions have publicly raised concerns about the level of global water consumption and issued targets and recommended policies in a bid to promote water conservation. This includes the UK government, who have introduced water-specific targets as part of the Greening Government Commitments. In line with this, the MoJ has made a commitment to improve on the 4% reduction in water consumption that was achieved in 2014-2015 measured against the 2009-2010 baseline figures. This water strategy is designed to aid the department in delivering on these commitments.

### Scope

The Ministry of Justice currently possesses the second largest central estate in government, with a portfolio of over 1650 buildings. The latest cross-government report on the environmental impact of the government estate found that the MoJ was responsible for 25% of all governmental water use.<sup>1</sup>

The complexity of the MoJ estate, with varying natures and purposes of each building, means that there can be no 'one size fits all' strategy for water management. Analysis shows that the MoJ 'custodial' estate accounts for approximately 90% of MoJ water use. Accordingly, this strategy covers the MoJ HQ, HMCTS, HMPPS and Probation Estates, but will prioritise action on the HMPPS custodial estate. It focusses on water consumption and does not include sewerage or surface water drainage. This strategy looks forwards to 2020.

### Ongoing review

Implementing a water strategy in a complex organisation such as the MoJ requires regular reviews and adjustments to ensure the strategy is still relevant and appropriate. As such, a key element of this strategy is that it is a circular process with regular reviews and assessment to ensure that plans evolve in the light of changing targets, regulation, technologies, utility costs, commercial routes, and stakeholder responsibilities.

We recognise that deregulation of the water market may over time play an important role in MoJ delivering, and iterating this strategy as the industry improves its offer to customers and the infrastructure permits improved monitoring.

---

<sup>1</sup> [www.nao.org.uk/wp-content/uploads/2017/11/Ministry-of-Justice-environmental-sustainability-overview-2017.pdf](http://www.nao.org.uk/wp-content/uploads/2017/11/Ministry-of-Justice-environmental-sustainability-overview-2017.pdf)

### 3 Key Drivers and Policy

The following drivers and policies inform the purpose and direction of the water strategy.

#### 3.1 National Audit Office: Ministry of Justice Environmental Sustainability Overview

The National Audit Office released an overview of environmental sustainability at the MoJ in 2017. The overview highlighted that the MoJ does not set water targets for individual prisons; noted an increase in water consumption in 2016-2017; and encouraged more initiatives to improve environmental sustainability.<sup>2</sup>

#### 3.2 Environmental Audit Committee: The Ministry of Justice Environmental Sustainability

The Environmental Audit Committee released a report in 2018 which, although recognising efforts made by the MoJ in sustainability, noted that 'there are still significant gaps and weaknesses in its accountability arrangements, and it is not yet meeting its ambition to embed sustainability in everything it does'.<sup>3</sup>

#### 3.3 2015 Spending Review

The 2015 Spending Review set a requirement for the MoJ to reduce resource expenditure from £6.2 billion to £5.6 billion. The total expenditure on water was £24 million in 2015-2016.<sup>4</sup>

#### 3.4 Greening Government Commitments

The Greening Government Commitments set out the actions that UK government departments and their agencies will take to reduce their impacts on the environment. This includes targets to:

- Continue to further reduce water consumption by 2020. Each department will continue to improve on the reductions they had made by 2014-2015. Departments will set internal targets and continue to report on office water use (m<sup>3</sup> per Full Time Equivalent).
- Continue to buy more sustainable and efficient products and services with the aim of achieving the best long-term, overall value for money for society.

#### 3.5 The European Union – The Water Framework Directive<sup>5</sup>

The European Union has foreseen that if certain water efficiency measures are implemented, water consumption could reduce by 40% throughout Europe. The framework also promoted the widespread installation of smart metering to improve water efficiency.

---

<sup>2</sup> [www.nao.org.uk/wp-content/uploads/2017/11/Ministry-of-Justice-environmental-sustainability-overview-2017.pdf](http://www.nao.org.uk/wp-content/uploads/2017/11/Ministry-of-Justice-environmental-sustainability-overview-2017.pdf)

<sup>3</sup> [publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/545/545.pdf](http://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/545/545.pdf)

<sup>4</sup> [www.gov.uk/government/publications/spending-review-and-autumn-statement-2015-documents](http://www.gov.uk/government/publications/spending-review-and-autumn-statement-2015-documents)

<sup>5</sup> [ec.europa.eu/environment/water/water-framework/index\\_en.html](http://ec.europa.eu/environment/water/water-framework/index_en.html)

### 3.6 MoJ Sustainable Operations Policy, March 2017

This document sets out the Ministry of Justice aims and objectives for improving water efficiency, specifically:

- *“We will meet the GGC Requirement to reduce water consumption. To help achieve this, we will seek the early identification of water leaks. We will also seek to reduce water consumption by following best practice guidance, specifying the use of water-efficient appliances and technologies. We will also install smart meters and efficient technologies such as water harvesting where practical and economical to do so.*
- *We will also:*
  - *Reduce and work towards eliminating, the provision of bottled mineral water and to instead provide tap water at meetings, for staff and other hospitality requirements.*
  - *Ensure that our activities do not cause damage to water supplies, groundwater or other natural water courses”<sup>6</sup>*

### 3.7 BREEAM Policy

The Building Research Establishment Environmental Assessment Method (BREEAM) states that, in delivering sustainable design and construction, development should consider conserving water resources and minimising vulnerability to water runoff.

### 3.8 Government Buying Standards (GBS) for water-using products

The GBS for water-using products states the Government’s commitment to reducing water consumption on its estate and to buying more water efficient products to help meet the commitment.

DEFRA introduced the Enhanced Capital Allowance for water, which offers a 100% first year allowance for investments in listed water efficient plant and machinery. Approved machinery includes remote meter reading technology.

### 3.9 Water Act 2014

The Water Act 2014 refers to the ‘duty to promote the efficient use of water’.

### 3.10 Water White Paper 2011

The Water White Paper, published by Parliament, notes that they heard persuasive evidence about the role that metering plays in reducing demand and encourages companies to actively promote metering to save water. It recommended that government propose a clear strategy for implementation of a wider programme of metering and variable tariffs to help spur water efficiency.

### 3.11 Regulatory Context

On the 1<sup>st</sup> of April 2017, the water market in the UK was transformed through deregulation. The retailer and wholesaler were split up, enabling most businesses and organisations in England to choose which company they want to supply retail services to their property. In Wales, only organisations that consume more than 50 million litres of water a year can switch their provider.

---

<sup>6</sup> Ministry of Justice Estate’s Directorate’s ‘Sustainable Operations Strategy’, March 2018

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/692521/sustainable-operations-sustainable-operations-strategy.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692521/sustainable-operations-sustainable-operations-strategy.pdf)

## 4 Baseline and targets

As mentioned in section 3.4, the Greening Government Commitments (GGC) include a target for departments to improve reductions they made on water consumption in 2014-2015, against a baseline of 2009-2010.

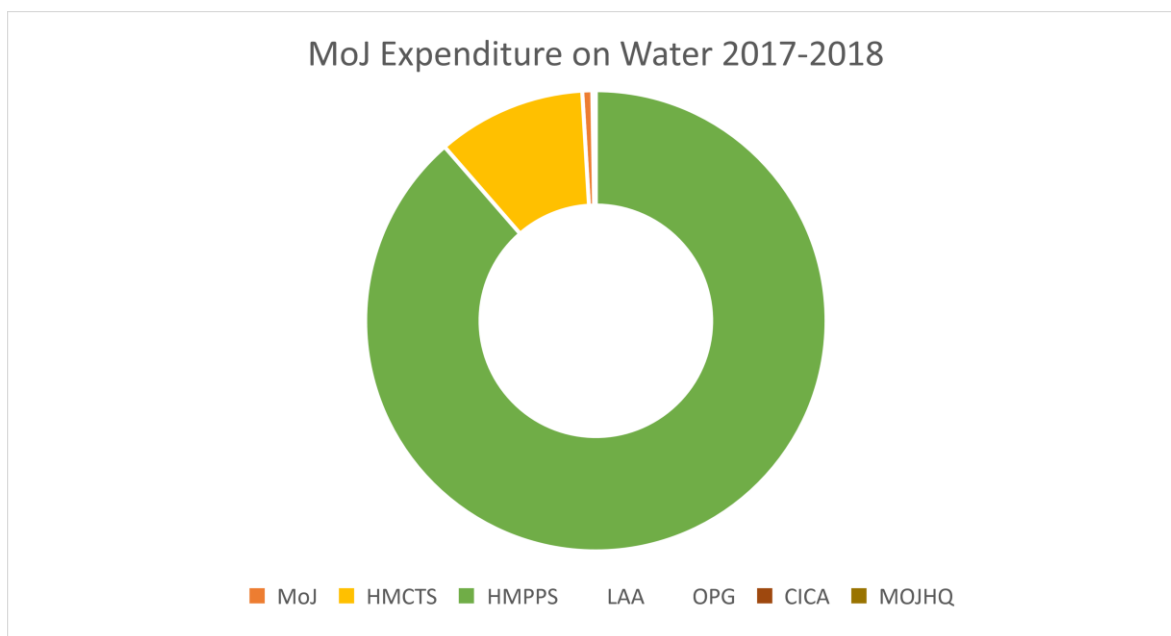
The following table details the total water consumption and financial costs across the MoJ Estate from 2014 to 2018.

**Table 1: Water Consumption and Financial Costs 2014-18**

		2014-15	2015-16	2016-17	2017-18
<b>Non-Financial Indicators</b>	Total Water Consumption (m <sup>3</sup> '000)	8,796	8,356	8,682	9,067
<b>Financial Indicators</b>	Total water supply costs (£'000,000)	24.7	24.3	25.2	25.9
<b>Performance against 2009-10 baseline</b>	Total percentage increase/decrease	-4%	-5%	-1.2%	-2%

In accordance with the GGC, the MoJ has set a target to improve upon the 4% reduction achieved in 2014-2015, against the baseline of 2009-2010.

When investigating the financial expenditure on water within different clusters in MoJ, as shown in Figure 1, it is clear that HMPPS spends significantly more on water consumption than any other MoJ cluster and presents the greatest opportunity for reducing water consumption across the estate to meet our target.



**Figure 1: Expenditure on Water in MoJ 2017-2018**

## 5 Stakeholder Mapping

Several stakeholders are involved in managing water consumption across the MoJ estate. The Sustainability Team commits to working with each of these stakeholders to more effectively manage and monitor water consumption, and will provide guidance on responsibilities, key actions and, if relevant, reporting requirements. An initial stakeholder mapping has been undertaken in Figure 1, with the lead stakeholder highlighted in red; this mapping exercise will be reviewed regularly.

### MoJ Estates Directorate

- Sustainability Team
- Project Delivery
- Technical Standards

### MoJ Service Delivery

- Prison Governors and team
- Regional Estate Managers, HMPPS (REMs)
- Service Delivery Managers, HMPPS (SDMs)

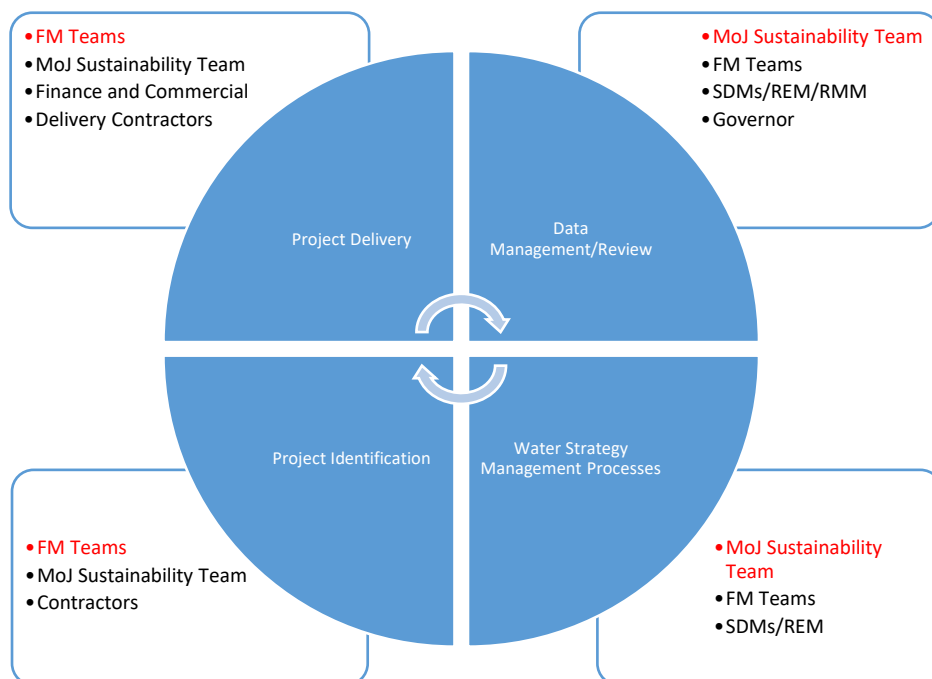
### MoJ Finance and Commercial

- Finance teams
- Commercial teams

### Third Party suppliers and contractors

- Facilities Management providers (FM)
- Water Retailers
- Private prisons
- Delivery contractors
- Data contractors

**Figure 2: Water Strategy – Stakeholder Mapping**



## 6 Monitoring Ongoing Water Consumption

To effectively manage and reduce water consumption, we need better processes for monitoring water use and identifying and correcting excessive use in a timely manner. This includes setting benchmarks and more ambitious site targets, introducing smart meters, and ensuring that data is reviewed and guidance is given on best practice.

### 6.1 Setting benchmarks and site targets

One key aspect of monitoring consumption is identifying benchmarks for best practice and setting ambitious site-specific targets.

Focussing on the custodial estate, the Sustainability Team has:

- Used existing water use benchmarks for water use in prisons, based on annual consumption per prisoner to develop individual site targets. This benchmarking has allowed us to identify 'good', 'typical' and 'poor' practice across the custodial estate. These will be communicated to the relevant Governor, REM and FM provider, as part of other work on energy and carbon targets to create a cohesive sustainability picture for each prison. They will be reviewed regularly to ensure accurate and realistic results in an ever-changing environment.
- Undertaken a recent review of water use in prisons to establish a more up to date benchmark moving forward and to drive best practice, whilst taking into account extraordinary factors such as laundries, where possible.

For the wider MoJ estate, we will ensure future FM contracts require suppliers to set benchmarks and site-specific targets.

- For the wider MoJ estate, we will ensure future FM contracts require suppliers to set benchmarks and site-specific targets.

### 6.2 Introducing and reactivating smart meters

Smart meters, or Automatic Meter Reading (AMR) enable more detailed and timely data on water consumption, which can be used to verify billing information and identify, and correct, any excessive water usage more quickly.

Currently, most of our buildings do not have smart meters installed, and the minority that do are not being as regularly monitored as they could be.

This strategy commits the Sustainability Team to facilitating the installation of more smart meters across the full MoJ estate, in accordance with the Sustainable Operations Strategy published in March 2018. We will:

- Facilitate the fitting of smart meters on all main water meters across the custodial estate and other large water users in the next two years, where feasible, and facilitate the reactivation of smart meters that are currently deactivated. We will aim to do this through the re-tendering of our Water Retail Services, following the deregulation of the water industry as referenced in section 3.11. We will consider on a site-by-site basis whether further sub-metering is beneficial and cost effective.
- Track the installation and use of smart meters, to record progress and identify gaps and opportunities.
- Ensure key stakeholders, such as FM providers, collect and review smart meter data to identify excessive water use, particularly where smart meters are currently unmonitored.
- Measure any savings attributable to smart meters.

## 6.3 Data review and guidance

The following channels will be used to ensure effective data review and guidance on managing water consumption:

*Across the MoJ estate:*

- **Monthly Water Review:** Facilities Management Contractors across the MoJ Estate already report the water consumption on a monthly basis. We will ensure future FM contracts require suppliers to review the data, identify any excessive water consumption and formulate plans on how to address it.

*On the custodial estate:*

- **Governor Reporting:** A regular summary report on site water usage and prison performance will be provided to prison Governors and an invitation extended to the quarterly Energy and Carbon Review meetings.
- **HMPPS Sustainability Forums:** The Sustainability team will meet with FM providers and REMs to review water consumption, share best practice, and provide guidance and training.
- **REM and SDM Forum Meetings:** The Sustainability team will work with SDM/REM forums to provide guidance and training on new approaches, and to inform REMs/SDMs of any developments relating to this Water Strategy.

## 7 Targeting Worst-performing Sites

To maximise reduction in water consumption, the Sustainability Team have used water performance data to identify sites with excessive, unaccountable water consumption. Ten prisons have been identified as having the maximum opportunity for reducing water consumption.

Targeting these ten sites, the Sustainability Team will:

- Work with technical consultants, FM providers, Prison Governors, REMs and SDMs to investigate water usage, identify unaccountable water use where possible, and create bespoke site-specific action plans to reduce consumption.
- Prioritise these sites for the installation of smart meters to actively monitor water consumption through hourly reads; analysis of this data will determine whether the water consumption is entirely accounted for or is indicative of a leak. Water consumption will be monitored for a minimum of 2 weeks to establish a control against which to measure results.
- Share best practice and circulate lessons learned across the estate.

## 8 Future-proofing the Estate

The Sustainability Team will work with project owners to ensure that all new builds on the MoJ estate achieve at least a BREEAM rating of 'Excellent' and comply with water-related Technical Standards and Government Buying Standards for water-efficient equipment and controls.

Additionally, the Sustainability Team will continue to assess projects presented at the monthly Estates Investment Board and raise any concerns or opportunities relating to water consumption.

As the water industry is deregulated, the Sustainability Team will ensure that any new opportunities are maximised on the estate, and that any other action being taken considers industry changes and innovation.

## 9 Communications

Reducing and managing water consumption cannot happen in a vacuum; it requires all stakeholders to play their part. As well as the specific guidance and communications mentioned throughout this strategy, the Sustainability Team will launch a communications campaign to educate staff and stakeholders across the MoJ estate. This will include a behaviour change campaign as part of the MoJ 'Be Seen Being Green' campaign.

## 10 Economics, Finance & Commercial

There are a number of funding routes available to deliver the projects and commitments in this strategy. The MoJ is committed to exploring these different options whilst looking to achieve best value for money. These include:

- Central Government Funding
- Departmental funding
- Innovative funding – such as gain share arrangements or third-party funding.

## 11 Contact Details

For any questions regarding this strategy, or suggestions for improvement, please contact the Sustainability Team on [SDEnquiries@justice.gsi.gov.uk](mailto:SDEnquiries@justice.gsi.gov.uk)



© Crown copyright 2018

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit [nationalarchives.gov.uk/doc/open-government-licence/version/3](http://nationalarchives.gov.uk/doc/open-government-licence/version/3)

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Alternative format versions of this report are available on request from [SDEnquiries@justice.gsi.gov.uk](mailto:SDEnquiries@justice.gsi.gov.uk)