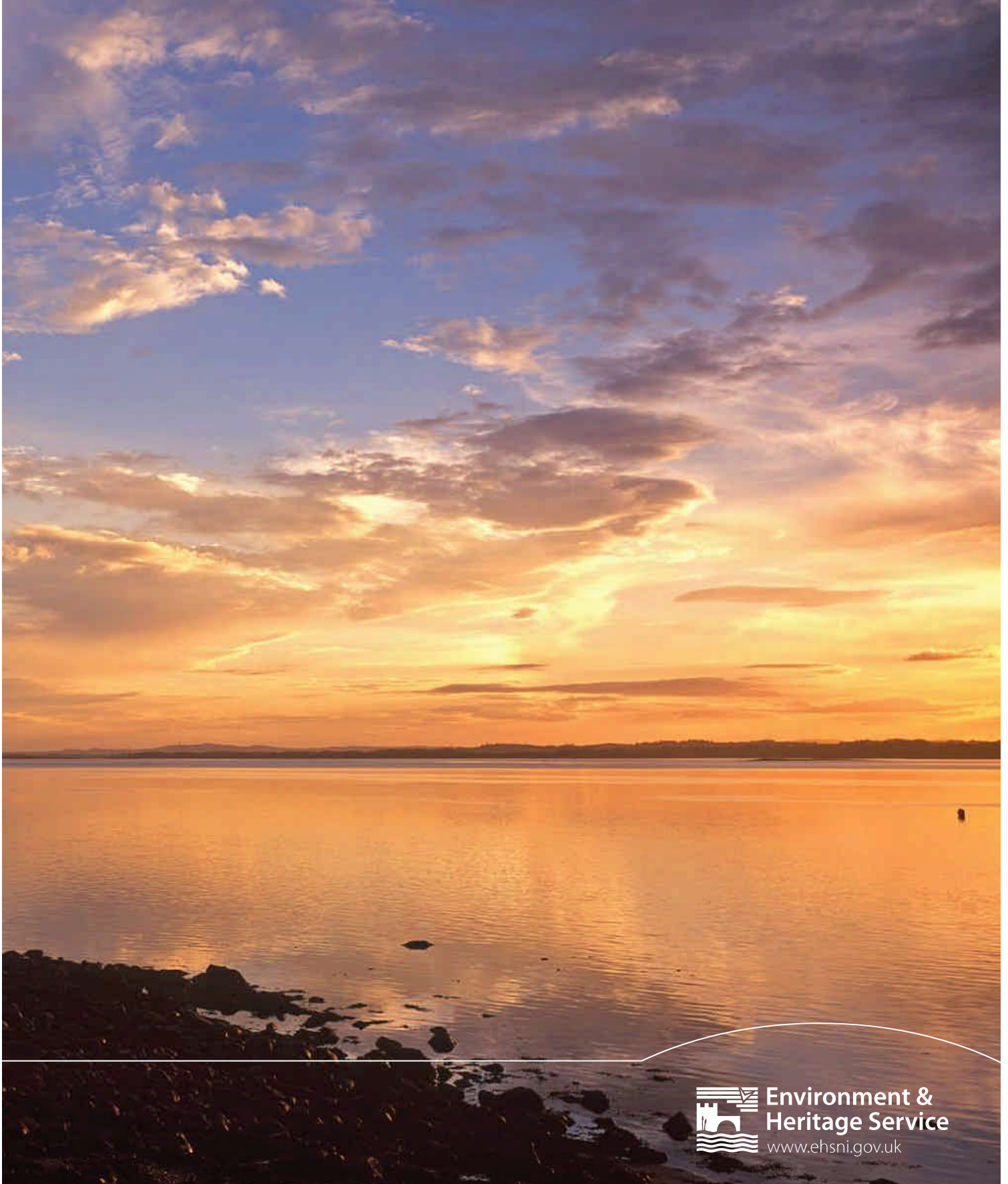


Environment & Heritage Service

'Our Environment, Our Heritage, Our Future'

State of the Environment Report for Northern Ireland

March 2008



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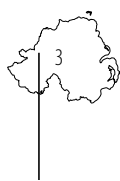
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WHAT IS INCLUDED AND WHAT IS NOT?

This is the first assessment of the state of Northern Ireland's environment. Information about the condition of the environment for 2005 (unless otherwise stated) in relation to Air and Climate, Water, Land and Landscape Management, Biodiversity, Built Heritage, and Waste and Resources is used. The information has been taken from a range of sources including EHS and other public bodies. The report highlights shortfalls where important information on key issues is currently unavailable.

This report does not provide quantitative data on human activities which may have an impact on the state of the environment, or provide a comprehensive view of trends in past years. It aims to set out baseline data to provide a future measure of the changing state of our environment.



FOREWORD

MINISTERIAL FOREWORD



ARLENE FOSTER MLA
Minister of the Environment

A handwritten signature in black ink, appearing to read 'Arlene Foster', written in a cursive style.

I am very pleased to introduce this first report on the State of the Environment in Northern Ireland prepared by the Environment & Heritage Service of my Department.

The choices we make, our lifestyles and our demands create the Environment in which we live. In turn the quality of our Environment influences the development of our children, what we become and, through its natural landscape and built heritage, our sense of well being and identity.

This State of the Environment Report brings together very important information to help us understand the pressures and impacts our activities are having on the natural and built environment.

The report shows that there are some knowledge gaps that need to be filled but it also clearly highlights the policy priorities we need to address for our economic and environmental benefit.

This report and the views on its content will help my Department to map out in detail what government, business and society as a whole needs to do.

The environment belongs to everyone in Northern Ireland and we all share a responsibility in setting priorities which respond to this assessment. Can we each really make a difference? I firmly believe that, by acting together, we can do so; the record of improvements in air quality and recycling are encouraging examples.

However, there are serious challenges to meet on Biodiversity, Climate Change and Energy. It is not for others to fix; there is no time for hesitancy; no "I will if you will": just time for each one of us to commit to now play our part in shaping the environment we want.

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Introduction

This is Northern Ireland's first State of the Environment (SOE) Report. The report contains comprehensive information on the condition or 'state' of the environment, presented as a set of thirty baseline indicators, in six chapters:

Air and Climate (6 indicators);

Water (8 indicators);

Land and Landscape Management (6 indicators);

Biodiversity (4 indicators);

Built Heritage (2 indicators); and

Waste and Resources (4 indicators).

A full list is presented in **Table IN1**

Each indicator provides information and data on the condition of the environment in the baseline year of 2005, unless otherwise stated. The information has been taken from a range of sources, including EHS and other public bodies. The report highlights shortfalls where important information on key issues is currently unavailable.

The indicators have been selected by consideration of the robustness, timescales, and currency of data sets, and compatibility with counterpart agencies in the rest of UK and Ireland. The set will be kept under review and extended or amended as new data sets become available.

Some changes to the environment are rapid, and can be picked up by regular monitoring reported annually. Other changes are incremental, or may be subject to cyclical fluctuations, for example due to weather patterns, and a true picture of real trends may not be clear until after ten years or more of recording. Future reporting against these indicators will be timed to reflect the most meaningful intervals for the data used.

Of necessity, the report is technical in nature, and will be of interest to policy makers, professionals, researchers and those with a working interest in the environment. A separate non-technical summary gives immediate access to key findings for a wider audience.

This report does not provide data on human activities, such as energy use or resource consumption which may have an impact on our environment, or a complete assessment of trends in past years. It forms a baseline of collated information, to provide a future measure of the changing state of our environment. It does not report on performance or activities of government bodies or agencies charged with environmental duties.

An overview of the geographical features and historical activities which have created our environment, and the forces driving change now and in the future, give context to the indicators. Key challenges are presented at the end of each chapter, outlining current state, trends and causes where known.

Based on this information, the main threats to achieving a high quality environment are put forward. Future State of the Environment reports will provide a measure of how robust our environment is in resisting these threats.

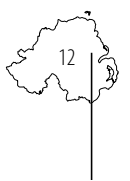


Table IN1: Indicators included in Northern Ireland's State of the Environment Report

Air and Climate	
AC1: Nitrogen Oxides	Annual Mean Concentrations of Nitrogen Dioxide (1993-2005)
AC2: Sulphur Dioxide	Annual Mean Concentrations of Sulphur Dioxide (1992-2005)
AC3: Particulate Matter	Annual Mean Concentrations of Particulate Matter less than 10 microns (PM ₁₀) (1992-2005)
AC4: Ground Level Ozone	8-hour Mean Maximum Concentration of Ozone (1987-2005)
AC5: Ammonia	Annual Emissions of Ammonia (2002-2004)
AC6: Greenhouse Gas Emissions	Total Greenhouse Gas and Carbon Dioxide Emissions (1990-2005)
Water	
W1: Eutrophication in Rivers	Annual Mean Phosphorus, and Composition and Abundance of Aquatic Plants (1995-2005)
W2: Chemical River Quality	GQA Chemical Classifications for Rivers and Compliance with the Freshwater Fish Directive (1995-2005)
W3: Biological River Quality	GQA Biological Classifications for Rivers (1995-2005)
W4: Eutrophication in Lakes	Annual Mean Lake Total Phosphorus (2003-2005)
W5: Bathing Water Quality	Compliance with Bathing Waters Standards (1988-2005)
W6: Winter Nutrient Concentrations	Winter Concentrations of Dissolved Inorganic Nitrogen in Sea Loughs (1992-2005)
W7: Groundwater Quality	Concentrations of Nitrates and Phosphorus in Groundwaters (2005)
W8: Discharge Quality	Effluent Compliance with Discharge Consents (2000-2005)
Land and Landscape Management	
LL1: Earth Science	Number and Condition of Earth Science Sites (1988-2005)
LL2: Soil Quality	Soil Phosphorus levels of Managed Grassland (Winter 2004-2005)
LL3: Sustainable Land Management	Participation in Agri-environment Schemes (2007)
LL4: Area of woodland	Area of New Forest and Woodland Plantings (2001/02-2005/06)
LL5: Land cover	Percentage Changes in Primary Habitats and Land Cover (1986/91-1998)
LL6: Landscape Character	Assessment of Landscape Character Areas (2000)

Biodiversity	
BD1: Nature Conservation Designations	Extent of Designated Areas and Condition of Selection Features (1998-2005)
BD2: Priority Habitats	Status of Priority Habitats listed under the Northern Ireland Biodiversity Strategy (2002-2005)
BD3: Priority Species	Status of Priority Species listed under the Northern Ireland Biodiversity Strategy (2002-2005)
BD4: Wild Birds	Trends in Populations of Wild Birds (1994-2005)
Built Heritage	
BH1: Monuments and Sites	Number of Scheduled Historic Monuments (2007)
BH2: Listed Buildings	Number of Listed Buildings and Number at Risk (2007)
Waste and Resources	
WR1: Waste Arisings	Total Municipal Waste Arisings (1995-2005/06)
WR2: Waste Recycled and Recovered	Total Municipal Waste Recycled and Recovered (2005-06)
WR3: Packaging Waste Recycled and Recovered	Businesses obligated under the Packaging Regulations (2005)
WR4: Number of Landfills	Number of Licensed Landfills (2005)