

# Microeconomic Evidence for the Benefits of Investment in the Environment - review

**MEBIE – the Micro-Economic Benefits of Investment in the Environment Review is an in-house literature review. It is focussed around ‘green infrastructure’ interventions and is structured using the Ecosystem Approach. It is designed to help Natural England staff make the case for the natural environment to decision makers such as Local Authorities and Local Enterprise Partnerships. It is structured to be easily accessible to staff, with benefits presented both in terms of major economic themes and in terms of individual ecosystem services. Each section provides a critical review of the literature, which informs staff whether, and under what circumstances, the proposed benefits of investment in the Natural Environment exist. This is followed by examples. Where there are monetised studies these are offered, but where there are none more qualitative examples are offered. Case studies are written up in pithy bullet points, designed to make the case as effectively as possible whilst being true to the evidence base. Background to the examples is offered in footnotes, so that staff can understand where the evidence they are presenting has come from.**

## What was done

The steps in the development of MEBIE were:

- Agree concept and structure with Julian Harlow (Economics Principal Specialist) and Mike Grace (Land Use Principal Specialist).
- Check concept and structure against representative user group (Lead Advisers in Land Use).
- Locate relevant literature to review through discussion with relevant internal and external colleagues, drawing on previously published literature reviews, particularly ‘The Benefits of Green Infrastructure’) by Forest Research.
- Critically review the economics literature, selecting it for inclusion on the basis that it met Treasury Green Book standards and was helpful.
- Critically review natural and social science literature.

- Draft document. Circulate to relevant Natural England specialists for comment.
- Circulate to user group for comment.
- Amend and publish internally.

Since internal publication MEBIE has been presented to the evidence group (see Natural England’s viewpoint below). It has also been presented to 120 staff via webinar and made available on the Technical Information Exchange.

## Specialist Group

- Harlow, Julian - Principal Specialist Economics
- Brotherton, Pete - Principal Specialist Biodiversity
- Hopkins, John - Principal Specialist Ecosystem Services (up to March ’11)

## Microeconomic Evidence for the Benefits of Investment in the Environment - review

- Waters, Ruth - Principal Specialist Ecosystem Services (from April '11)
- Burn, Alistair - Principal Specialist Freshwater and Pollution
- Collins, Tim - Principal Specialist Water and Coastal Issues
- Morecroft, Mike - Principal Specialist Climate Change
- Macgregor, Nicholas - Principal Specialist in Landscape Scale Conservation
- Stone, Dave - Principal Specialist Health and Access
- Alexander, Ian - Team Leader Landscape Scale Delivery Southern England (about organics)
- Cathcart, Rob - Senior Specialist in Freshwater and Wetlands
- Wetherell, Anna - Senior Specialist, Hydrology and Hydrogeology
- Shepherd, David - Senior Specialist, Invertebrate ecologist
- Clarke, Stewart - Programme manager, Ecosystem Approach and Climate Change

### User Group

- Schüder, Ingo - Senior Adviser, Green Infrastructure
- Davies, Fran – Senior Adviser, Land Use in Kent (until March '11)
- Ward, Helen – Lead Adviser, Statutory Land Use Consultations

### Results and conclusions

This question is not really appropriate to a wide-ranging literature review of this nature.

### Natural England's viewpoint

The final report was presented to the Evidence Group on the 18th July 2011, with the recommendation that it be published on both the Intranet, and (once staff internally and been made aware of it) on the internet. The Evidence Group notes from the meeting state that the group welcomed the paper and agreed with the recommendations (N:\Board and Executive Services\BES Filing System\BES 12 - Evidence Group\2011\18 July).

### Selected references

The report contains several pages of references. There are none which are particularly more important than others.

### Further information

For the full details of the research covered by this information note see Natural England Research Report NERR033 – *Microeconomic Evidence for the Benefits of Investment in the Environment - review*.

Natural England Research Reports and other technical publications are available to download from the Natural England website:

[www.naturalengland.org.uk](http://www.naturalengland.org.uk).

For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail [enquiries@naturalengland.org.uk](mailto:enquiries@naturalengland.org.uk).

### Report authors

The author was Tim Sunderland, Economist Senior Specialist, with grateful acknowledgement to my many internal reviewers.

### Keywords

Agriculture, cost benefit, diffuse water pollution from agriculture, economic growth, economics, ecosystem services, flood risk management, freshwater, green exercise, green infrastructure (gi), green roofs, green spaces, health and the natural environment, house prices, local authorities, local enterprise partnerships (leps), mental health, micro economic benefits of investment in the environment (mebie), regeneration, tourism.

This note is published by Natural England under the Open Government Licence for public sector information. You are encouraged to use, and re-use, information subject to certain conditions. For details of the licence visit

[www.naturalengland.org.uk/copyright](http://www.naturalengland.org.uk/copyright). If any information such as maps or data cannot be used commercially this will be made clear within the note.

© Natural England 2012