

# Evidence

## Environmental costs and benefits at the site of the London 2012 Olympics

### Project summary

This project set out to estimate what value has been added to the environment in and around the Olympics site in East London through the Environment Agency's engagement with the planning system. It found that the Environment Agency used £1.5 million of resources to influence the spending of approximately £113 million, which achieved estimated benefits to people and the environment of £116 million over a 40 year period. However a range of sources of uncertainty make it difficult to draw any more nuanced conclusion than this: it is probable that the benefits of improving the environment for people and wildlife at the Olympics site were slightly higher than the costs of doing so.

#### Background

This work was designed to test the concept that it would be possible to obtain a reasonably good idea of the costs and benefits of the environmental improvements at a development site using only currently available techniques and valuation data. It was led by the Environment Agency's Economics and Social Science team with support from the London Area team which worked with colleagues from other Areas to provide much of the data and 'institutional memory' required for the project.

#### Method

To understand the value added through influencing the planning of the Olympics site, the appraisal focused on five important areas:

- flood risk
- surface water
- groundwater
- contaminated land
- recreation

Site-level data on key environmental indicators from before and after July 2005 – when it was announced that London had won the right to host the 2012 Olympics – were provided by the Environment Agency's London Area team. These data were supplemented with further datasets and a variety of methods – such as hedonic analysis, diff in diffs and a novel use of National Water Environment Benefits Survey (NWEBS) data – was then used to monetise these physical measurements.

#### Results

The central estimates of the costs and benefits are set out in the table below.

Benefit category	Estimated costs	Estimated benefits
<b>Flood risk</b>	£50.5 million	£43.0 million
<b>Surface water</b>	£2.0 million	£2.0 million
<b>Groundwater</b>	£0	£0.5 million
<b>Contaminated land</b>	£0	£0
<b>Recreation</b>	£60.5 million	£70.5 million
<b>TOTAL</b>	£113.0 million	£116.0 million

Because some environmental benefits cannot be given monetary values as yet, the value of the environmental benefits above is very likely to be an underestimate, although it is not clear to what extent.

#### Reflections

It seems that it is possible to obtain a reasonably good idea of the costs and benefits of the environmental improvements at a development site using only currently available techniques and valuation data. But as expected, this project identified a number of improvements that could help to make future appraisals such as this one more accurate and more robust. These improvements can be grouped as follows.

1. Appraisals of this nature should be built in from the start of relevant development projects.
2. More thought needs to be given to the method of integrating different appraisal methodologies designed for discrete policy areas so that they can be focused on a single development site.
3. Better valuation data are required for some ecosystem services and new valuation data are required for others.
4. It was not possible to construct a robust methodology to assign 'credit' for environmental costs and benefits to a single organisation within a partnership approach to delivery such as that at the Olympics site.

This summary relates to information from the following project:

**Title:** Environmental costs and benefits at the site of the London 2012 Olympics

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