



APSE briefing 15-29

Natural Capital

This briefing is provided to APSE member authorities in England but will be of interest to the environment, parks, grounds and horticulture sector on a UK wide basis.

Key Issues:

- This APSE briefing highlights the overall aims of the Government White Paper – The Natural Choice 2011, and the subsequent work carried out by the Natural Capital Committee in its attempt to highlight key strategic natural capital assets which are vital to both human health and economic development in the UK via the development of a 25 year strategy and action plan.
- The briefing also highlights the role of local authorities in helping deliver these aims via the use of their green space assets.
- APSE however has concerns that the current level of funding cuts being experienced by parks and green space services are working against the Natural Capital Committee’s work and is looking to Government to address the lack of funding now being made to parks and green space services.

Natural capital is the elements of the natural environment which provide valuable goods and services to people such as clean air, clean water, food and recreation.

Due to pressure of a growing population, demand for more goods and services has resulted in the natural capital of England becoming severely depleted and damaged, to the point that some argue we now have a natural capital deficit. As the UK faces its greatest levels of population growth in the next 25 years these demands and pressures will increase.

1. Introduction

In 2011, the Government produced a White Paper – The Natural Choice which as part of it aims, declared that as a result of the report’s recommendations, collectively we will be the *“first generation to leave the natural environment in a better state than it inherited”*

Out of this white paper came the Natural Capital Committee (NCC), which has produced three reports highlighting the need for Government to work closely with the private sector and NGO’s to develop a strategy and a corresponding 25 year plan to deliver the aims of the White Paper.

In the paper there is reference to '**natural capital**', which is often defined as the world's stocks of natural assets which include geology, soil, air, water and all living things.

It is from this Natural Capital that humans derive a wide range of services, often called ecosystem services, the services which make human life possible. The most obvious ecosystem services include the air we breathe, the food we eat, the water we drink and the plant materials we use for fuel, building materials and medicines. There are also many less visible ecosystem services such as the climate regulation and natural flood defences provided by forests, the billions of tonnes of carbon stored by peat lands, or the pollination of crops by insects. Even less visible are cultural ecosystem services such as the inspiration we take from wildlife and the natural environment

Unfortunately pressures on natural capital is all already too high and they are set to intensify as the UK's population continues to rise faster than in any previous 25 year period. Estimates show that the UK's population will increase by 8 million during this period with associated increases in demand for homes, food, clean air and water as well as the need for jobs and infrastructure.

2. The Natural Capital Committee

The work carried out by the NCC has identified that the UK's natural capital is in decline through over-exploitation and degradation from polluting technologies. This decline has caused 'natural capital deficits' in certain areas and this is proving costly to our well-being and economy. If natural capital is to be safeguarded decisive actions have to be taken.

The NCC have begun:

- identifying the natural capital which needs to be secured
- identifying those assets most at risk
- looking how to improve natural capital –based on a cost benefits analysis.
- measuring and monitoring changes in natural capital
- valuing natural capital in order to help make investment decisions.

Valuing natural capital has proved difficult but work is being carried out to put a monetary value on certain elements in order to justify all the effort being put into its protection and restoration.

The City of Birmingham is currently developing a Natural Capital Planning Tool which looks at 10 different ecosystem services and identifies 25 indicators which when measured will give an ecosystem services impact score which will help highlight the benefits and return on investment if these ecosystems are restored and improved. Equally important is the identification of those stakeholders and investors required to fund these improvements.

It is believed that targeted investment in the best locations will deliver significant value for money and generate large economic returns. The NCC has identified that there is a need for significant investment in major habitat protection and improvement in areas such as woodland planting which helps promote clean air, peat land restoration recognised as being a significant asset with regards to carbon capture, undertaking wetlands creation which has major flood alleviation benefits and intertidal habitats which mitigate against coastal erosion and protect coastal towns and settlements.

3. The role of local authorities

These investments are obviously going to take considerable time and effort to realise, but equally there are more immediate improvements that can be made and on much more local scale. Within the last of the NCC report is the realisation is **the value of urban greenspaces** and the benefits they bring to millions of people with regards to mental and physical health thereby reducing demands on the NHS. In addition urban greenspaces also have an important role in improving local air quality, providing flood alleviation opportunities, carbon capture, reducing urban heat island effect enhancing and improving biodiversity and providing diversionary activities to reduce anti-social behaviour and promote community cohesion through activities and events. In some parks and urban greenspace local food growing projects have been very successful. This recognition gives parks managers the ideal opportunity to consider the value of their parks beyond the norm, that of pleasant green spaces where people spend leisure time, but rather to see them as cross-cutting assets which offer untold benefits both to human health and well-being, environmental sustainability and economic development.

As over 80% of the UK's population now lives in an urban area, accessible and safe green space is critical to our nation's wellbeing. A range of studies has shown that living next to green space has a positive effect on a wide range of health indicators such as stress and disease morbidity.

"Many of the health trends that are afflicting society at the moment could in part be solved by getting people into nature. Having access to green space on your doorstep reduces health inequalities. It that straight-forward" – Dr Jo Barton, Essex University

These effects if reduced by exposure to the natural environment and parks are likely to be accompanied by substantial economic benefits.

Looking at the long-term planning of our cities and expanding urban lifestyles, there is now a major challenge for policy-makers, planners and treasurers, both in the public and private sectors in that not everyone has access to good quality green space, and as more people realise the benefits associated with proximity to nature, this challenge will have to be addressed. Therefore investments to secure this objective could lead to significant savings in reduced incidents of stress and mental health problems reduced obesity through increased leisure opportunities and a general feeling of well-being brought about by being close to green space. These benefits transfer to a healthier workforce and higher levels of productivity which translates to improvements in the nation's economic wealth.

The view of Government, and the NCC, is that there should be a focus on those elements of natural capital which have significant benefits both for economic growth and public well-being and that institutions such as local authorities should factor natural capital into their work, for example, taking it into account in future investment projects, including it in management and maintenance responsibilities and furthermore, this should be supported by having evidence to show how they are improving natural capital. It is equally important that this work should be supported by adopting targets for achieving improvement with clear milestones which monitor progress

The financing of this work is yet to be decided but ideas such as creating a wealth fund derived from the depletion of non-renewable resources and compensation being paid for the damage caused to natural capital are all being considered.

However, the clock is ticking as favourable investment opportunities to protect and improve natural capital may not be available indefinitely. Changes in natural capital may become irreversible, through continued degradation beyond threshold levels and can no longer be restored beyond reasonable cost, although what is classed as reasonable cost must be open to interpretation.

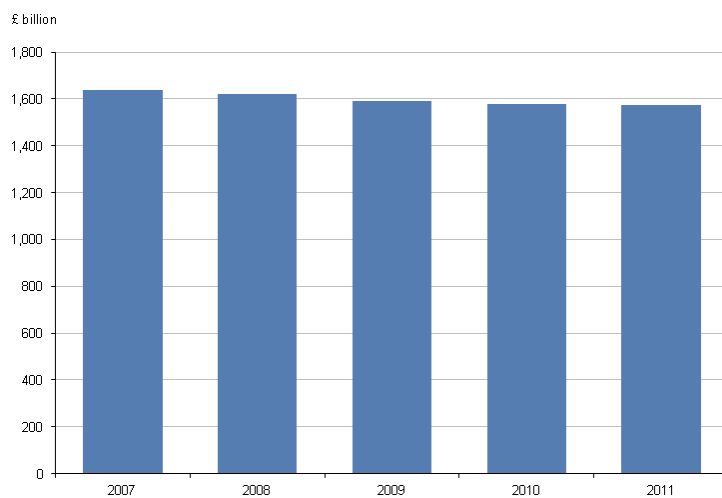
4. Aggregate monetary estimates of components of UK natural capital

By applying the Net Present Value to the following components:

- Sub-soil assets
- Agricultural land
- Timber
- Fisheries
- Water abstracted for public water supply
- Outdoor recreation (a cultural ecosystem service)
- Net greenhouse gas sequestration (a regulating ecosystem service)

The aggregate monetary value of these components of UK natural capital is estimated to be £1,573 billion in 2011; 4.1% lower than in 2007.

The chart below shows the aggregate monetary estimates of components of UK natural capital. .



Source: Office for National Statistics

These figures include mineral reserves, energy reserves, net greenhouse gas sequestration, outdoor recreation, agricultural land and timber, and water abstracted for public water supply.

5. APSE Comment

Whilst APSE understands the work and aims of the Natural Capital Committee, it does have serious concerns about how current and future potential levels of funding reductions, particularly in non-statutory areas of parks and green spaces will allow these ideals to be delivered.

Local authorities have been reporting ongoing budget cuts now in excess of 60% in real terms in their parks and greenspace budgets. As a consequence, some are now having to make service cuts, or in some cases, cease to provide services which will seriously affect the viability of some of their parks and greenspaces.

The last decade has seen the renaissance of many of England's parks through Heritage Lottery funding, and this has been reflected in the increased public use of these areas. Linked to this has been the growing body of medical and social research which has shown the cross-cutting benefits such areas bring. In addition APSE's own performance networks data suggests that there remains a high degree of public satisfaction in parks services; however as budget reductions start to impact on service delivery levels there is evidence of decline in satisfaction starting to appear in performance data.

If standards are allowed to decline, then the users of parks will cease to visit and we will return to the 1970's scenario, when many parks became 'green ghettos' with low usage levels and high levels of anti-social behaviour.

Equally the lack of funding will mean that many of the previously mentioned environmental benefits will also be lost, thereby reducing the natural capital value of parks and greenspaces, which is in direct contrast to the aim of the Natural Capital Committee's strategy.

Some would argue that the reports written by the Natural Capital Committee highlight the recommended use of economic instruments such as taxes, charges and permits as well as the introduction of new and innovative funding opportunities such as plastic bag charges and crowdfunding to help conserve and improve natural capital. The reality is that many of these are in the future and unproven in this field, whilst cuts are happening now. The danger is that a great deal of natural capital could be lost or irreversibly degraded before such funding sources come into effect.

Therefore APSE feels that if the Government's aim of improving the natural environment is a genuine one it must ensure that current levels of funding are not continually eroded whilst waiting for new sources of funding to appear. Indeed it could be argued that there should be greater investment in parks and green spaces as it has been estimated that the value of green spaces to the National Health Service alone, is in excess of £2.1 billion in reduced health treatment costs.

A further point to consider is that if the Government expects private sector and NGO's to invest in natural capital projects, then it would seem rather perverse that it is cutting funding to the very same areas in its control, and consequently how can local authorities in their influencing role be expected to promote others to play their part. Whilst Government would argue that it is local authorities that can self-determine how they choose to spend local budgets it is noted by APSE that in a recent Parks State of the Market Survey the vast majority of respondents felt that Parks services were unfairly in the line of budget reductions because priorities at a local level are naturally set to those area of statutory responsibility leaving non-statutory services such as parks more open to budget pressures.

Currently Birmingham City Council is developing an accounting system which will help identify the value of natural capital assets. One of the criteria is the proximity of natural capital assets to people and how many people benefit from them. If this is the case, urban greenspace will

undoubtedly have some of the highest values both in terms of proximity and usage, which further adds to the argument that such spaces need to be adequately funded to ensure their cross cutting benefits and sustainability are guaranteed.

We are at a tipping –point in relation to local authority controlled parks and greenspaces. Everyone agrees they are key natural capital assets that they have multiple benefits ranging from climate change mitigation to considerable human health benefits, and they have major societal impacts way beyond their original role. Yet we continue to cut the funding because they are non-statutory services and therefore easy targets.

A decision needs to be made, and it is quite a simple one, do we value our parks and green spaces enough so that we ensure funding is made available to sustain them, or do we let them fall into an environmental, economic and social downward spiral?

Imagine a town or city without its major parks and green spaces, now that really would be a legacy for our future generations, but would it be one our generation would want to be remembered for?

Wayne Priestley

APSE Principal Advisor