

Land Regeneration through Forestry

by

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The regeneration of brownfield and derelict land plays an important role in the delivery of the UK Government's Sustainable Communities agenda, and is vital in society's move towards a more sustainable way of life. For example, the regeneration of land into quality greenspaces is recognised for its capacity to provide people with a sense of well-being, pride and a place for recreation. Quality greenspaces can also enhance ecological and environmental value, improve neighbourhood appeal and landscapes, provide shade and abate pollution.

The regeneration of land is a multi-stage process. Even the regeneration of agricultural land to forestry is partly to the same process. Not all stages are always pertinent, but the process remains the same. A sound understanding of all stages and how they influence the overall process of regeneration is essential when conducting a change in land use to greenspace such as community woodland or forest stands. Establishing a quality greenspace requires appropriate emphasis to be given to each stage of the regeneration process.

The process of regenerating land to greenspace can be thought of as comprising four steps: Identification and Reclamation, Consultation and Design, Implementation and Delivery, and Management and Maintenance. The principles of sustainable development are pivotal to all of the stages within the regeneration. Delivering a product that is environmentally, socially and economically sustainable requires as much emphasis on the site investigations as in the establishment and community engagement processes. Similarly, commitment must be made to the long-term management and maintenance of the established greenspace.

The selection of a site for regeneration may be automatic (for example, following the closure of mineral extraction operations) or based upon a process of site ranking in order to identify those sites most suited to fulfilling certain aims and objectives (for example, to provide public benefit via access to open spaces). Sites must then be subjected to investigation via desktop and walk over studies in order that constraints to regeneration can be identified. Constraints may be: i) chemical – relating to historical contamination, excessive or diminished nutrient status; ii) physical – relating to buildings and underground structures; iii) environmental – relating to weather, exposure, soil status (availability and quality), geology and hydrology; iv) geographic – relating to topography, landform and access; v) biological – relating to rare and protected species on site or, conversely, noxious alien species, or vi) economic (for example, relating to a need to perform remedial works or import a soil resource).

Appropriate detail to site investigations provides a basis for appropriate risk management, an evidence-based design process and enables a SWOT (strengths, weakness, opportunities and threats) analysis to be performed. Informed decision making not only increases the potential for long-term financial savings but also maximises the opportunity for successes in establishment and economic and environmental sustainability. Successes from a social perspective predominates project aims in contemporary land regeneration. Subsequently, community consultation during design and community engagement during implementation is critical. Provision of a site that delivers against local needs and desires promotes adoption, self policing and socially inclusive use.

Demonstrating achievements, learning lessons and justifying future projects of land regeneration must be achieved through a programme of monitoring that is integrated across social, environmental and economic impacts. Monitoring must be undertaken during all stages of regeneration (remediation, reclamation and establishment), as well as support site management and have sufficient longevity to evaluate project outcomes.