

# South East Wales Regional Strategic Framework

## Matrix Project details

<b>Local Authority(s)</b>	All SE Wales Authorities
<b>Activity</b>	<i>Cross Cutting Themes</i>
<b>Sub-set</b>	<i>Natural Resources</i>
<b>Schemes/Project Title:</b>	City Region Landscape Park - making the most of our USP (working title)

### **Project Description:**

*Please provide a general overview of the project:*

The Well Being of Future Generations (Wales) Act 2015 creates a duty for specified public bodies to meet wellbeing goals whilst observing the sustainable development principle. It includes 7 well-being goals to create a resilient Wales, including “a nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change)”.

Part 1 of The Environment (Wales) Act 2016 focuses on the sustainable management of natural resources, creating duties to manage Wales’ natural resources in a more proactive, sustainable and joined-up way. It also helps to tackle the challenges we face and is focused on the opportunities our resources provide. In this context the term natural resources covers our landscapes and habitats (including coastlines, rivers, canals, lakes, urban & rural greenspaces, forests, wildlife/biodiversity) and air, together with the interconnecting trails that allow our communities, businesses and visitors to utilise and benefit from them.

The outstanding natural resources and cultural heritage of the South Wales City Region are recognised by visitors and communities as some of the area’s very best assets. With such variety in a relatively small geographical area, it provides a unique selling point and major opportunity for growth.

Given the legislative duties and the recognised opportunity provided by our natural resources, this proposal will create the required framework and partnership mechanisms, and facilitate a coordinated approach for the local authorities and their stakeholders to deliver the necessary natural resource management duties set out in the new laws.

This project will use the experience and partnership mechanisms developed under the Valleys Regional Park, to establish a framework for the production of one or more strategic and sustainable, area based natural resource management plans, together with a suite of supporting thematic cross boundary projects that will underpin the aspirations of the City Region Growth Plan.

The regions natural assets and stunning landscapes provide a high-quality setting, supporting many vibrant communities and local businesses, and are cited among the top reasons for attracting inward economic investment.

From the hugely successful Wales coast path, the black to green success story of the ex-industrial South Wales Valleys to the beautiful Brecon Beacons and meandering Wye Valley there are many opportunities for careful management of our natural resources to further stimulate tourism growth, under pin the local economy, improve health and wellbeing, and ensure that communities, skills and education all benefit and help create community resilience.

Of equal importance, is the vital role our natural resources play in providing society with water, food and mitigating the impacts of climate change, flooding and air pollution. A well-functioning, high quality network of well utilised greenspace, walking and cycling trails can help create social cohesion, provide tourism attractions, create jobs, provide venues for major events and support many other opportunities to engender pride in local people and the natural environment.

Working in partnership, we will produce a series of data driven, and evidence based natural resource management plans, these will provide the overarching framework under which the important cross boundary thematic projects will sit and contribute to the regions wider socio-economic regeneration and environmental enhancement.

In so doing these plans will also assist and demonstrate how the local authorities, and our other partners are meeting their new statutory duties coming forward through the Well-being of Future Generations (Wales) Act 2015 and the forthcoming Environment Bill (expected 2016).

The following thematic projects will support local food production, safe guard and create jobs, assist in climate change adaptation by maximising the role of green infrastructure in managing water and temperature regulation, provide high quality greenspace for health and well-being, attract inward investment, improve biodiversity, resilience and eco-connectivity across South Wales. They will support the improvement and management of the highly visible network of uplands, woodlands, nature reserves and country parks, rivers, reservoirs and canals, heritage sites and attractions.

The management and promotion of these will be coordinated and connected and integrated with communities such that local people take pride and are inspired to enjoy and benefit from healthy lifestyles in a unique environment that provides education, skills, volunteering, community engagement and employment opportunities, and attracts visitors and businesses. Working in partnership, we will develop a coherent vision to sustain, develop and promote the characteristic natural landscapes of the area which have been shaped by man, connecting communities and commerce to the natural and cultural heritage.

### **Thematic Activity and Rationale for their Inclusion**

#### **Strategic Natural Resource Plans**

Develop area based Natural Resource Management Plans to integrate natural resource management at a local level, underpinned by the ecosystem approach\* and the United Nations' Convention on Biological Diversity (CBD) principles.

Natural resource and green infrastructure planning experience in Monmouthshire, Bridgend and Torfaen needs to be examined to create a consistent regional approach to enhance natural resources and the services they provide. For example the SCCAN (System Cynorthwyo Cynllunio Adnoddau Naturiol) – Natural resources planning support system of mapping natural resources that has been piloted by Natural Resources Wales in Torfaen.

\* “The ecosystem approach has a broad scope that goes beyond ecosystems themselves to encompass social, cultural and economic factors that depend on the services ecosystems provide. Ecosystem services are the benefits derived from ecosystems. Some of these benefits are quantifiable, for example the provision of food, fibre or fresh water (provisioning services). Regulating services include the benefits obtained from the regulation of ecosystem processes, which includes for example climate regulation and flood alleviation (regulating services). Cultural benefits are also derived from natural settings like landscapes and seascapes which include recreation, tourism, cultural heritage and aesthetic experience (cultural services).” Environment Bill WG 2015

#### **Upland Management**

The uplands are a characteristic feature of the City Region, dominating many of the area's towns and villages. Primarily composed of sheep-grazed commons comprising heathland and acid and neutral grassland with areas of native woodland and plantation forestry, including bog and heath. They provide crucial habitats for wildlife, are responsible for water gathering, and act as a major carbon store through peat and soils, so helping to mitigate climate change.

The uplands located in the Valleys area require major restoration and management in some areas to improve their condition and maximise the ecosystem services they provide. They have deteriorated through insufficient or lack of grazing, or, as a result of inappropriate grazing, which has led to the accumulation of bracken and increases in unwanted species such as Purple Moor grass. In addition, the Valleys uplands remain the target for deliberate fires thus further degrading them whilst there are continued concerns amongst many about the effects of illegal off-road motor biking which impacts negatively on the condition of the uplands and the ability of upland graziers to sustain their farm enterprises.

Welsh Government grant secured through the Nature Fund has enabled an Upland Management Plan to be prepared for SE Wales that sets out a strategic approach and series of focused actions to improve our uplands. It will be essential to extend this approach to include Merthyr, Rhondda Cynon Taff and Bridgend.

Apart from the biodiversity benefits and support provided to the farming community, this element of the programme is critical in terms of its potential to reduce Wildfires in the Valleys and Flooding in the Valleys,

Cardiff and Newport.

## **Health and Well-being – Outdoor Active Lives**

We have an abundance of quality natural greenspace (open countryside, woodland, coastline, water bodies, urban and rural parks and open spaces) in SE Wales providing ample opportunity for physical exercise with the majority of people living in close proximity to it. However as the 2007 Valleys Regional Park Visioning Report highlighted, 48% of people living in the Valleys had no relationship with their natural green space.

The Public Health Bill (Wales) spells out some of the serious challenges that face Wales now and in the coming years, including a rise in lifestyle-related diseases, changing health and social needs as a result of an ageing population, and real and potential health problems associated with climate change.

The prevalence of physical and mental ill-health in a considerable number of South Wales communities is much higher than in the UK and indeed Wales as a whole. The incidence of chronic diseases such as heart disease, respiratory disease, cancer, and diabetes is far higher than most other areas of Wales. Wales' Chief Medical Officer (CMO) has identified physical inactivity as a principal health risk, and it is costing Wales over £650 million a year.

In addition to the huge personal and family burden caused by this high incidence of ill health, it also places an enormous strain on already heavily pressed resources. In Torfaen, nearly one third of all adults report having a limiting long-term illness, which impacts upon their ability to work.

Type 2 diabetes is common in the South Wales area. In total, an estimated £14 billion in the UK is spent each year on treating diabetes and its complications such as stroke, heart disease and kidney disease. This is likely to rise with the incidence of diabetes which is estimated to rise to around four million people in the UK by 2025. Type 2 diabetes accounts for around 90% of all diabetes cases and is strongly associated with excess body weight and a lack of physical activity, and is becoming more common in younger people including children and teenagers. In Caerphilly, 62% of the adult population is overweight, more than the Welsh average of 57%, with 26% classified as obese, the second highest level in Wales. As the Public Health Bill (Wales) consultation paper highlights this not only affects an individual's health and wellbeing, but also brings a hefty economic cost with illnesses related to obesity estimated to cost the NHS in Wales £86 million each year.

A Caerphilly cohort study undertaken by Cardiff University monitored the health habits of 2,235 men over a 35-year period. Perhaps unsurprisingly, it clearly showed that lifestyle is a clear determinant of health and wellbeing. The study identified five healthy behaviours as fundamental to the best chance of a disease-free lifestyle namely: taking regular exercise, non-smoking, a healthy bodyweight, a healthy diet, and a low alcohol intake. In the study, people who consistently followed four or five of these behaviours showed a 60 per cent decline in dementia and cognitive decline with exercise the strongest extenuating reason. In addition, compared with people who followed none of them, these people also experienced 70 per cent fewer instances of heart disease, diabetes, and stroke.

The Landscape Institute points out in its position statement, 'Public Health and Landscape: Creating Healthy Places', that there is a rapidly growing evidence base which indicates that "spending on health care could be reduced if greater investment was made in preventing ill health before it has a chance to occur".

The 2003 Wanless report to the National Assembly on the state of health and social care in Wales stated that for diabetes in particular, there was a need for "rebalancing towards prevention and early intervention". The Welsh Government's 'Fairer Health Outcomes for All' produced in 2011 highlighted the need for prevention with an emphasis on a 'settings' approach to provide a common preventive pathway for the most common causes of early ill-health. This document stated that:

**"One of the most important environmental assets in communities is its green space. Proximity to, and time spent in the natural environment impacts on factors such as perceived general health, blood pressure, mental health and the rate of recovery from illness. There are also indirect benefits, such as encouraging physical activity, social contact and integration, children's play, and improving air quality. Access to green spaces is unequally distributed across society with poorer social groups having in general lower access. More equal access to green space can therefore play an important part in reducing inequities in health."**

## Accessibility of Greenspace

Whilst health problems are widespread across the City Region area, they are equally prevalent in areas where people appear to have easy access to open green space. The partners have been working with Natural Resources Wales to produce a GIS dataset that covers the entire geographical region highlighting all the parcels of land that can be considered as Accessible Natural Green Space. Once complete this dataset will allow us greater insight into where to make greenspace interventions that have the greatest likelihood of achieving health and well-being effects.

This dataset will feed into the wider all Wales Data layer and provide important quantifiable data regarding the provision of greenspace and how it delivers health and well-being benefits against per head of population. During recent years the local authorities have worked with their stakeholders to significantly enhance the quality of and access to green space within the area. Evidence shows that when communities engage with their local greenspaces, and when greenspaces are fully integrated with the built environment, there are direct health and well-being benefits for people, wildlife and habitats. They can help to create social cohesion, provide opportunities for skills development and education, and help mitigate the impacts of climate change, flooding and air quality.

A key component of this programme will therefore be a focus on completing the GIS Database of accessible greenspace

## Site Based Activities

An Outdoor Active Lives proposal has been developed as part of the Coca Cola Park Lives initiative that will operate across Greater Gwent to raise awareness of the amazing extent and variety of quality open greenspace in the region & to increase the numbers of people participating in a range of outdoor activities to benefit their health & well being. It will bring together sport and environment specialists from 5 LA's to run a series of outdoor based events & activities over 2 years to benefit 50,000 people.

Ideally a similar approach would be taken across the rest of the City Region area.

## **Pollinator Action Plan**

Pollinators are animals, usually insects, which transfer the pollen from one flower to different flowers of the same species to enable plants to set seeds. Bees, wasps, hoverflies, flies, beetles, butterflies and moths are the major groups of insects which are pollinators in Wales. Pollinators are essential for maintenance of human life on earth as they enable crops to be produced for food and for other materials such as timber. They also pollinate many wild flowering plants which form the basis of wild ecosystems. Ultimately, human life on earth depends on pollinators.

It is widely accepted that pollinators are declining in Wales, Britain and Europe, and have been for many years. In Wales between 1985 and 2005 there was a 23% decline in the Honeybee population, a trend which is thought to be continuing. The main causes are loss of flower-rich habitats and use of pesticides in agriculture. They may also be declining due to pests and diseases, spread of non-native species and climate change. By adopting appropriate management practices, we can help to support pollinators in the countryside, and thus ultimately our own well-being.

The management of our open spaces (including roadside grass verges) is currently going through a period of change in most authorities with reduced cutting regimes, partly due to budget pressures, but also to meet legislative requirements under the Natural Environment and Rural Communities Act relating to biodiversity.

Welsh Government grant secured through the Nature Fund has enabled a SE Wales Pollinator Action Plan to be prepared that sets out a strategic approach and series of focused actions to improve land for pollinators. It will be essential to extend this approach to develop local projects to implement the action plan and include Merthyr, Rhondda Cynon Taff and Bridgend

## **Green Growth Education and Skills Project:**

A skilled workforce is required to enhance that currently available, providing flexibility in the management of

green infrastructure assets. These assets provide the setting and a key contribution to regenerating the region, supporting innovative economic development opportunities that exist around grounds maintenance, forestry/timber, construction, community food growing and action for pollinators.

These opportunities would fit well with the creation of apprenticeship schemes involving defined career path structures, as well as an associated volunteer scheme.

The types of training undertaken will also provide useful transferrable skills related to the building and construction industry

There clearly is plenty of scope for enhancing and developing provision if this funding is secured. Alignment with some of the other education and skills focused initiatives that are already in place will be the key to resourcing this. For example:

- Opportunities for participants in the Bridges into Work 2 project to acquire the skills necessary to be able to apply for the jobs being developed.
- Similarly, opportunities for participants in the Working Skills for Adults 2 project who may want to acquire qualifications so they can change career/improve prospects
- Opportunities for young people aged 16-25 to engage in pre-vocational learning through to apprenticeships and this could be in the areas of green jobs, horticulture, food-related.

### Education

The natural environment provides a range of opportunities for learning and skills development with the Foundation Phase Education Curriculum (Early Years 3 to 5) and Key Stage 1 of the National Curriculum (5 to 7 years) placing great importance on using the outdoors as a classroom where children can work on a daily basis. We will encourage a more coordinated approach to the provision of environmental education across the region, building on the expertise of Newport City Council and the Forgotten Landscapes education programme.

### Skills

Managing and enhancing the natural environment requires professional, technical, and practical skills which can provide employment opportunities.

There will be a 'Green Growth' development programme delivered by partners to increase skills in traditional Countryside Crafts/Trades related to construction and other activities, forestry, landscape, countryside management, country crafts, community food growing, biodiversity, tourism development and guiding, adventure sports, healthy living, and green energy production.

Training programmes in the natural environment provide an opportunity to improve community resilience and help tackle the worklessness agenda, through improving confidence and mental wellbeing, as well as a lack of basic practical skills. Training will also provide people with future proofing skills, e.g. growing own food, sustainable transport solutions, energy awareness and global environmental awareness, which can help people reduce living costs and in itself tackle poverty whilst contributing to a low carbon economy.

A skilled workforce is required to manage and enhance the environmental assets which provide the setting and a key contribution to regenerating the area, and to support the innovative economic development opportunities that exist around tourism, timber, construction and renewable energy. The intention is to do this by creating an apprenticeship scheme with a defined career structure as well as an associated volunteer programme.

The apprenticeship scheme will comprise a number of modules according to the particular interest of individuals and needs of the sector, available as paid apprenticeships and voluntary positions which feed into a particular career route:

- 1. Environmental Guardians:** A cohort of young people (16-24 year olds) to act as 'environmental guardians' in the City Region to protect and enhance the natural environment, support sustainable land and site management, encourage local communities to use the countryside, help develop tourism based on the natural environment and improve the economy through up-skilling and job creation.
- 2. Forest Operations:** Welsh Timber is being actively promoted for sustainable construction, including

housing and this module will help meet the skills gap over the next few years and beyond. It will include tree nursery and planting, forest management, timber extraction, marketing and conversion and construction.

3. **Timber Construction:** Linked to 2, this will up skill individuals in practical techniques required to construct recently developed modular energy efficient timber building systems.
4. **Renewable Energy:** The creation of a team of individuals who can support organisations, community groups and individuals in the development of renewable energy opportunities focused on micro-hydro and wood fuel. This would be augmented by a separate practical skills development opportunity focusing on the practical implementation of community energy schemes.
5. **Community Food Growing:** The provision of training within communities based on local food production, generating an income for the local economy involving food growing, processing and marketing across the region in a more coordinated way.
6. **Pollinator Action Plan:** Training in land management techniques that support pollinating insects and the establishment of a network of trained volunteers in bee keeping, providing them with the necessary skills for business set up in bee keeping.

Through a scoping exercise undertaken in 2012 that was entirely focused on Module 1, the local authorities, RSPB, Groundwork and Natural Resources Wales (CCW at the time), identified a collective need for 20 paid and 43 voluntary positions in these organisations alone just to maintain existing facilities. Further consultation is required to establish current and future training needs associated with all 6 modules within the scheme, involving other partner organisations.

### **Community Food Growing and Marketing**

This part of the proposal is designed to tackle food poverty and contribute to food security, creating a vibrant community food sector where every food experience has the potential to benefit the people of the City Region either economically, physically, socially or culturally. The activities will need to be aligned with Communities Firsts Programmes where appropriate, with the following specific aims:

- increase the production of food to provide jobs and training within this sector, generating an income into the local economy.
- provide a local source of affordable and sustainably produced fresh fruit and vegetables to increase food security and resilience within communities and reduce food poverty.
- encourage both social and private enterprise and enable new food business start-ups.
- engage local communities in the production, consumption and celebration of food creating vibrant, connected, healthier and more sustainable communities.
- be zero carbon, using sustainable methods of production and distribution. Exploring opportunities for hydro-energy, to provide both energy as well as income into the programme.
- create an informed and skilled population able to make active choices about their diet, lifestyle and environment.
- promote and increase the contribution of the area to the local and national food supply chain.
- enhance biodiversity through the increase in pollinator plants.
- Support community regeneration communities, through transformation of derelict land into vibrant green spaces.

## **Country Parks, Town Parks and Local Nature Reserves**

We have a wide range of town and country parks and Nature Reserves across the region which are highly valued by communities, providing visitor hubs and centres from which health and educational activities can take place. They also provide important wildlife habitats and connectivity corridors. Maintaining and enhancing these important sites will form an important component of the City Region Plan, as will seeking innovative approaches to financially sustaining them.

## **Access trails for Walking and Cycling**

The City Region has an extensive and well used network of walking and cycling routes which enable the public and visitors to access town centres, flagship country parks, green spaces and centres of employment. It also provides infrastructure to support the health and well-being objectives set out above.

The extension of sustainable transport and leisure routes together with the improvement and maintenance of walking and cycle routes which support destination management plans and enable the public to access greenspace will be an essential component of the programme.

## **Forestry and Forest Products**

South East Wales has a large land area devoted to forestry, much of that land being within public ownership, managed by Natural Resources Wales. The promotion of timber construction systems as an alternative to traditional approaches has the potential to meet a range of Welsh Government Policy objectives relating to job creation, tackling poverty, climate change mitigation, construction, housing, management of natural resources, energy efficiency, carbon reduction and education and skills.

Experience from other parts of Europe, various forestry experts and others in the timber sector suggests the adoption of timber based construction systems for housing could provide significant benefits when compared to the current approach:

- Local job creation in the forestry and timber supply chain sectors. Increased demand for Welsh timber for construction, fencing, packaging and fuel, should improve the timber incomes for woodland owners encouraging greater active management of the woodland resource. The National Forest Inventory indicates that the Welsh National Forest could sustainably deliver a further 500,000 m<sup>3</sup> of timber annually. That could generate an additional 1,000 jobs in the harvesting, extraction and haulage. These opportunities would be mainly in the rural areas of Wales.
- Carbon offsetting: Whilst the growing of timber captures carbon, when the timber is harvested and used in construction and for timber products, that carbon can be “captured” and “locked up” for an extended period, This is in contrast to the concrete and brick sector in which carbon is released during the manufacturing process. In his article for The Conversation, Chad Oliver, Pinchot Professor of Forestry and Environmental Studies, Director of Global Institute of Sustainable Forestry at Yale University, calculates that Building with wood consumes much less energy than using concrete or steel. For example, a wooden floor beam requires 80 megajoules (mj) of energy per square metre of floor space and emits 4kg CO<sub>2</sub>. By comparison, a square metre of floor space supported by a steel beam requires 516 mj and emits 40 kg of CO<sub>2</sub>, and a concrete slab floor requires 290 mj and emits 27kg of CO<sub>2</sub>.
- Energy Efficiency: Well designed Timber homes are a cost effective way to reduce domestic energy consumption. This has a positive effect on climate change by reducing emissions but also helps tackle fuel poverty.

- Ease of construction: Modular systems developed for timber allow most of the construction processes to take place indoors thereby avoiding costly delays and other problems associated with the frequent inclement weather in Wales. On site erection is a relatively quick process involving hours or days rather than weeks or months. Production line construction systems are well suited to improving control quality standards and reducing costs and wastage
- Natural Resource Management: The Welsh National Forest is not currently being fully utilised. Greater demand for timber should result in more woodland management which in turn should deliver recreational and biodiversity benefit. Welsh softwood forests grow enough timber to build one house every 10 minutes; it is one of the best environments in Europe for growing conifers, yet the UK is the third largest importer of timber in the World.
- Building Regulation Standards: Timber systems have been developed to achieve Code for Sustainable Home levels in excess of 3. This is where timber starts to become more economically competitive than other systems.
- Reduced Waste: UK construction currently produces 35% of landfill waste. Timber systems have the potential to significantly reduce this as all timber has a use.
- Export Potential: Greater use of the Welsh timber harvest in Welsh construction would reduce the quantity of timber imports. An expansion of the Wales based timber frame sector could also increase the added value export of timber and manufacturing systems to England.

In view of the above, the City Region is well placed to be a lead in the growing of timber for construction, carbon offsetting, modular timber building manufacture and sustainable housing. The technology, raw materials and skills are all readily available in the area, providing a unique opportunity to develop a fully sustainable industry.

### **Water Bodies: Rivers, Ponds and Canals**

The names of some of the Valleys, such as Rhondda and Taff, resonate around the world, but the rivers that created and named them have often been overlooked and neglected, often being polluted and sterile in the middle of the last century due to man's activities. However, the power of nature with a helping hand from man has regenerated the rivers, which largely run clean and clear nowadays and provide an important resource to support the regeneration of urban and rural settings.

Nevertheless the rivers still require attention, in particular where they course through some of our towns and villages. A small series of projects have been implemented at Cynon Valley River Park but the park has not realised its full potential and vision as articulated a decade ago in the Cynon Valley Local Plan. There are also still a number of locations where our rivers continue to be polluted by mine water discharge and Welsh Water Combined Sewer Overflows (CSO's).

Other iconic rivers in the area, such as the Usk and Wye, require action to secure their long term favourable condition to ensure the catchments continue to benefit from their important role including providing for food production, drinking water, flood regulation and supporting recreational activities and tourism businesses.

It is proposed here that a collective programme approach towards rivers, canals and indeed reservoirs and lakes to create momentum and support for projects being undertaken by NRW and Dwr Cymru/Welsh Water as well as organisations like the Rivers Trusts, Wye Usk Foundation, the Canal & River Trust, and existing catchment partnerships, e.g. the Wye Catchment Partnership.

It is also intended to examine opportunities to support projects as appropriate through micro-hydro revenue

streams. An example here might be the proposed development of the Navigation Colliery site at Crumlin by Navigation Cyf, a Community Interest Company (CIC), where opportunities to support its viability could be through an adjacent micro-hydro scheme on the River Ebbw. This approach across the region, taking into account the necessary ecological considerations, could help support community-led heritage projects.

In addition to the prospects to improve aesthetics, water quality, and provide energy, there are clearly opportunities for enhanced recreational and leisure use on lakes, rivers and other watercourses.

### **Invasive Species**

Invasive non-native species of flora and fauna are considered the second biggest threat after habitat loss and destruction to biodiversity worldwide and the greatest threat to fragile ecosystems. Because of the increase in the global movement of people and goods, they pose a growing problem in the conservation of biodiversity, and are a threat to economic interests such as agriculture, forestry and fisheries. Invasive species cost the UK economy an estimated £2 billion pounds each year.

This programme will support and build on the Managing Invasive Plants Project that has been running throughout the Heads of the Valleys area since 2009. A partnership of five local authorities led by Caerphilly CBC includes Blaenau Gwent, Merthyr, Rhondda Cynon Taf and other agencies such as Keep Wales Tidy, South East Wales River Trust and the Welsh Government was set up to identify and implement effective survey, treatment and monitoring methodologies. Similar initiatives are underway on the Usk and Wye catchments through partnerships including the Wye Usk Foundation, Natural Resources Wales, local authorities and other interests addressing invasive plants and species, including American Minx.

The main focus of the invasive species project will be on tackling the most problematic weed species Japanese Knotweed, Himalayan Balsam and Giant Hogweed. All three are particularly problematic in South Wales and not only have negative effects on the local environment but have started impacting on peoples everyday lives. Damage to buildings, landscaping and infrastructure are commonplace.

Tackling invasive species will also form a key component of the delivery plan of natural resource management plans for specific landscape scale opportunities.

### **Renewable Energy**

The natural environment of the region provides a range of opportunities for sustainable energy generation, such as micro-hydro and woodfuel. This can help deliver the Welsh Governments Green Growth Wales Programme and support the transition to a thriving low-carbon green economy with the income generated providing investment help sustain local projects and initiatives and safeguard jobs. Working with Local Partnerships, there is an opportunity to support community groups and organisations across the area to collectively harness that power.

An excellent example is that at the Forgotten Landscapes Project in Blaenavon where a micro hydro installation was created at the Dragon's Teeth along the Afon Lwyd to generate renewable electricity.

In addition to micro-hydro, there are other opportunities in the City Region to generate renewable green energy such as wood fuel for a new generation of wood chip boilers and ground source heat. Further feasibility work is suggested here.

### **Other Specific Landscape Scale Initiatives**

Partners involved in the development of this pro-forma have identified the following landscape scale focus areas based on particular opportunities. The themes identified above will need to form a component of development and delivery plan for each area.

- Blaenavon World Heritage Site
- Glamorgan Heritage Coast
- Gwent Levels
- Wye Valley AONB and Wye Catchment Partnership
- Llanthony

- Trothy

**Significance:**

Please 'mark' (x) on one of the boxes below and provide reasoning for your choice below that:

Local	X	Regional	X	National	X
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**Reasoning**

Developed in a coherent way, the South Wales City Regions natural resources have the potential to provide a transformational opportunity for the region which, through an innovative, integrated, strategic approach to management and investment, will establish the City Region as a lead in creating and sustaining an attractive, thriving, and productive environment that delivers sustainable economic, social, and environmental benefits and a high quality of life for all its citizens.

There are a wide range of assets, some of which are local, some regional, some national and we also have internationally important facilities. Many of these are significant in their own right, but to maximise their collective benefit, they need to be developed as a coherent set of opportunities managed on a scale that's wider than individual local authority boundaries.

A regional proposal is therefore being presented, encompassing a region wide strategic framework made up of projects that can be delivered at a local level. It has been developed by the SE Wales Natural Resource Management Partnership encompassing representatives from the 10 local authorities and Natural Resources Wales.

Many areas of the City Region are among the most deprived in the UK continuing to endure high levels of economic inactivity and lagging economic performance, poor physical and mental health and wellbeing, and comparatively low levels of educational attainment and skills, all of which impact hugely on the quality of life for its citizens and communities.

The continued pressing need to address these persistent inequalities is rightly a priority for already stretched financial and logistical resources. Despite overwhelming evidence demonstrating the role natural resources in ensuring our very survival, in some quarters increasing or even maintaining resources to sustain and enhance our natural heritage assets is seen as a dispensable luxury. Moreover, in some instances, the natural environment has been portrayed as an obstacle to economic development rather than being viewed as an essential asset vital to delivering a sustainable future.

However, a significant growing evidence base shows that working with our natural environment assets can contribute substantially and positively to address the issues many areas face. The City Region Growth Plan can play a fundamental role in helping to transform the future of the area by harnessing and maximising the potential of one of our greatest assets; the magnificent natural resources.

Significantly, every one of the SIPS drawn up by Local Service Boards in the Valleys identifies the natural environment as vital to the quality of life of their communities. Importantly, there is an increasing recognition and realisation that, in addition to the aesthetic and indispensable intrinsic ecological value of the area's natural environment, there is a need to harness and maximise the potential of the natural heritage assets to help address economic prosperity, health inequalities, education and skills deficits to help create and sustain the future viability and prosperity of the area and its communities.

The potential of the area's natural resources and landscape to drive the tourism economy, both as an overall attractor and in respect of natural environment based activity tourism, including walking and cycling features highly in visitor product assessment and is recognised in destination development plans.

The regional approach comprises:

- A coherent collaborative approach for partners to achieve their goals and objectives and enable strategic policy and plans to be linked more effectively to local delivery
- The benefits of critical mass and momentum where the whole is greater than the sum of its parts, minimising fragmentation and duplication and maximising the collective benefits of logistical and financial resources and investments
- Improved capacity to deliver in the face of diminished resources through a collective collaborative approach across boundaries and sectors

- Raised standards and consistency through networking and collective planning
- Greater cohesion and integration with the other initiatives such as the Metro , Urban Regeneration and Tourism
- Greater interest in sponsorship opportunities from the private sector due to scale and critical mass

### Project Status:

Please 'mark' (X) on one of the boxes below and provide details of the status below that:

Concept Stage:	X	Feasibility Study	X	Options Appraisal	X
Business Case	X	Consultation	X	Land Acquisition	X
Planning Permission	X				

### Details of the Project Status:

The majority of the projects will be on land already in public ownership/control, building on existing community partnerships and previous successful pilot investments, research and data.

### Proposed Project Timescales:

Please provide potential timescale to include key milestones eg design, consultation and construction.

Preparation of a framework for NRMP's in partnership with WG and NRW 2015/16	2015/16
Preparation of a series of catchment based NRMP's according to the criteria developed in the Framework	2016/17
Delivery of Uplands thematic NRMP already in place & possible replication across RCT, Merthyr & Bridgend	2016-2026
Accessible Greenspace GIS Database	2015-2017
Healthy Lifestyles: Outdoor Active Lives Programme	2016-2018
Delivery of Pollinator thematic NRMP already in place & possible replication across RCT, Merthyr & Bridgend	2016-2026
Green Growth Education and Skills Programme	2015-2020
Community Food Growing and Marketing	2015-2020
Urban Parks and Green Spaces, Country Parks and Local Nature Reserves	Ongoing
Access trails for Walking & Cycling	Ongoing
Forestry and Forest Products (Local Timber in Eco Building Feasibility Study)	2016/2017
Water Bodies – Rivers, Ponds and Canals	2015-2020
Control of Invasive Species	2015-2020
Renewable Energy	2015-2020
Specific Landscape Scale Initiatives	2015-2020

### Funding:

Please provide estimated total costs eg capital build, studies, consultations, business case and land:

The proposal is divided into various components, some of which are ready to deliver with immediate effect, whereas others will be informed by the Natural Resource Management Plan process. Some elements have detailed cost estimates whereas others require further feasibility.

Thematic Activity	Cost (£M)
Natural Resource Management Planning	0.45
Delivery of Eastern Valleys Uplands Natural Resource Management Plan (10 yr plan)	2.50
Outdoor Active Lives 2016/18 (Greater Gwent)	0.20
Delivery of Pollinator Action Plan (10 yr plan for Greater Gwent)	2.00
Green Growth Education and Skills	3.50
Community Food Growing and Marketing (Regional Cooperative Feasibility Study)	0.05

Urban Parks and Green Spaces, Country Parks and Local Nature Reserves	
Access trails for Walking & Cycling	
Feasibility Study on Local Timber in Eco-building Construction	0.05
Water Bodies – Rivers, Ponds and Canals	
Control of Invasive Species	
Renewable Energy	
Specific Landscape Scale Initiatives	

**Spend to Date / Potential Funding:** *What is your current spend to date, is there a funding gap and have you identified potential funding opportunities to pursue:*

The programme builds on £30M investment through the Valleys Regional Park together with a wide range of other investments delivered through the partner organisations. In addition Natural Resource Management Plans have been prepared for the Eastern Valleys Uplands and for Pollinators across Torfaen, Caerphilly, Monmouthshire and Blaenau Gwent).

This is a 10 year programme that is likely to evolve as the new legislation become embedded in the individual partners planning delivery mechanisms, which the various feasibility studies identified herein will undoubtedly inform. A review will therefore be required after one year. However there are a range of immediate opportunities that have been identified as a result of feasibility and strategies prepared to date. Immediate funding is therefore required to deliver the following:

Project	Total Cost	WG	NRW	EU	Other	Shortfall
Uplands NRMP Delivery	2,500,000					
Pollinator NRMP Delivery	2,000,000					
NRMP Framework	50,000	25,000	25,000			
Catchment Based NRMPlans	400,000					
Green Growth Skills Programme	3,500,000			1,750,000		1,750,000
Accessible Greenspace Database	5,000		4000		1000	0
Outdoor Active Lives	200,000				180,000	20,000
Community Food Feasibility	50,000					50,000
Timber/Eco Build Feasibility	50,000					50,000
Urban Parks and Green Spaces, Country Parks and LNRs	TBC					
Walking/Cycling Trails	TBC					
Living Levels	3,900,000				2,865,000	1,035,000
Other Specific Landscape Scale Initiatives	TBC					
Water Bodies	TBC					
Control of Invasive Species	TBC					
Renewable Energy						

#### Partners:

**Explanation:** *Do you have support for the project, and if so, who. Who are the projects' stakeholders and is there support for the project from the private sector.*

The project is supported by all 10 local authority environment/countryside managers, Green Space Wales which represents urban park managers, training providers and the third sector across Wales, Natural Resources Wales and Welsh Government. Extensive consultations were undertaken during the preparation of the Valleys Regional Park Future Options Report, not only with the local authority partners, but across a wide range of other stakeholder organisations.

There was almost unanimous agreement within the surveys that the Valleys' natural environment and cultural heritage are key assets that need to be worked with to harness and maximise their potential and that an enhanced collaborative approach is the way forward in the face of diminishing resources and to provide the collective strategic benefits.

The Group Leader for Economy, Environment and Culture from Torfaen Council and the Head of Ecosystems and Partnerships from Natural Resources Wales presented the opportunity to SEWDERG and it was clearly recognised as a growth opportunity, subject to the term "Valleys" being dropped from the title, given the wider area coverage.

Subsequently the opportunity was presented to the City Region Board which also supported the approach.

### Project Outputs and Outcomes:

*What are the expected short/medium and long term benefits of a successful project:*

#### Thematic Activities

Title	Description	Targets
Strategic Natural Resource Management Planning	Develop a City Region framework for natural resource management and a series of area based natural resource management plans according to WG and NRW guidance.	<ul style="list-style-type: none"> <li>1 City Region NRM Framework</li> <li>A series of area based NRM Plans</li> </ul>
Uplands Natural Resource Management	<p>Deliver the recently prepared SE Wales Upland Management Plan in Blaenau Gwent, Caerphilly and Torfaen - costed at £2.5M over 10 years.</p> <p>The approach should be extended to include Merthyr, Rhondda Cynon Taff and Bridgend.</p> <p>This element of the project is critical in terms of its potential to reduce Wildfires in the Valleys and Flooding in the Valleys, Cardiff and Newport.</p> <p>The outcome target figures above will probably be doubled if we encompass the other LA areas.</p>	<ul style="list-style-type: none"> <li>4000 Hectares of Bracken Management</li> <li>Boundary Repairs: 1.5km Dry Stone Walling, 1.5km Hedge, 30km Fencing</li> <li>Livestock Diversification</li> <li>Diversification of Income Streams</li> <li>Restoration of 42 Hectares of Dry Peat Bog</li> <li>Restoration of 12 Hectares of Wet Peat Bog,</li> <li>19 Hectares of Sphagnum Bog Improved</li> <li>69 Hectares of Upland Calcareous Grassland Improved</li> <li>200 Hectares of Heathland Restored</li> <li>400 Hectares of Heather Managed</li> <li>6000 Hectares of Marshy Grassland Managed</li> <li>10 Ponds Restored</li> <li>30 Ponds Created</li> <li>Water Quality Improvements for Upland and Rivers Fed from the Uplands</li> <li>Increase Red Grouse Numbers to 5 Birds/km</li> <li>Assess and Increase Numbers of Lapwing</li> <li>Assess and increase numbers of Brown Hare</li> <li>Regulate Surface Run-off</li> <li>Establish Conservation Grazing Contract with Commoners</li> <li>Establish Conservation Volunteering Scheme</li> <li>Run 10 Annual Multi-agency Landscape Crime Police Operations</li> </ul>
Accessible Green Space Database	Complete a GIS database of accessible green space for the City Region	<ul style="list-style-type: none"> <li>Complete Accessible Greenspace Audit and GIS database showing all accessible green space across the City Region</li> <li>?? % of green space accessible to the public</li> </ul>
Healthy Lifestyles: Outdoor Active Lives	Activity to raise awareness of the amazing extent and variety of quality open greenspace in the region & to increase the numbers of people participating in a range of outdoor activities to benefit their health & well being.	<ul style="list-style-type: none"> <li>Additional 50,000 Individuals/Year Physically Active in the Outdoors</li> <li>GP Referrals Linked to Eco-Schools (see AN)</li> </ul>
Pollinator Action Plan	<p>Deliver the recently prepared Pollinator Green Infrastructure Action Plan for Blaenau Gwent, Caerphilly, Monmouthshire and Torfaen - costed at £2M over 10 years</p> <p>The approach should be extended to include Newport, Merthyr, Rhondda Cynon Taff and Bridgend.</p>	
Green Growth Education and Skills Programme	Establish a more coordinated approach to the provision of environmental education across the	<ul style="list-style-type: none"> <li>5000 School Children/Year Benefitting from Organised Outdoor Education Activity</li> </ul>

	<p>region, building on the expertise of individual partners.</p> <p>Establish a regional green jobs training programme to meet the rapidly developing need for skilled individuals to manage and develop a range of activities in the natural environment sector in SE Wales:</p> <ul style="list-style-type: none"> <li>- Environmental Guardians</li> <li>- Forest Operations</li> <li>- Timber Construction</li> <li>- Renewable Energy</li> <li>- Community Food Growing</li> <li>- Pollinator Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>• 20 Paid and 43 Volunteer Park Ranger Apprenticeships/Year</li> <li>• 100 Individuals/Year Trained in Countryside Trades and Activities (Dry Stone Walling, Fencing, Hedge Laying, Chainsaw Use, Bee Keeping, Country Crafts, Community Food Growing, Adventure Sports)</li> </ul>
Community Food Growing & Marketing	The establishment of a regional initiative to tackle food poverty and contribute to food security by creating a vibrant community food sector.	<ul style="list-style-type: none"> <li>• Feasibility study and costed action plan</li> <li>• ??% increase in community grown food (as a percentage of total food grown)</li> <li>• ??no of individuals growing crops</li> <li>• ??no of allotments</li> <li>• ?? no of business start ups</li> <li>• ??% locally grown food purchased by retailers</li> </ul>
Urban Parks and Green Spaces, Local Nature Reserves and Country Parks	Management and enhancement of the wide and varied range of urban parks and green spaces, local nature reserves and country parks which are the vital backdrops for community existence and commercial activity offering important health intervention benefits, educational opportunities, tourism destinations, significant wildlife habitats and connectivity corridors that together, underpin so much of our environment and economy.	<ul style="list-style-type: none"> <li>• Maintain and enhance existing parks and green spaces according as set out in the NRM Plans</li> <li>• Maximise the health improvement benefits that quality parks and green spaces offer</li> <li>• Encourage an enterprise culture for green space management that will widen and increase opportunities for future development.</li> <li>• Identify diversification opportunities and new partnerships to make parks more financially sustainable</li> <li>• Develop the apprenticeship and job creation opportunities that parks and green spaces provide</li> <li>• Ensure increased and wider use of the Green Flag Award which is the benchmark national standard for parks and green spaces</li> <li>• Improve PLAY &amp; LEARNING opportunities through equipped and natural play space in line with Section 11 of the <u>Children and Families (Wales) Measure 2010</u> which places a duty on local authorities to assess and secure sufficient play opportunities for children in their area.</li> </ul>
Walking and Cycling Trails	Extension, improvement and maintenance of the extensive network of walking and cycle routes which enable the public to access greenspace.	

Forestry and Forest Products	Develop the areas forest resource for recreation, biodiversity, job creation, carbon offsetting, construction opportunities and to build sustainable homes.	<ul style="list-style-type: none"> <li>• Feasibility study on local timber in sustainable construction</li> <li>• ££ hectares of land under active management</li> <li>• ??? tonnes of carbon offset per annum</li> <li>• ??? jobs created in the forestry sector</li> <li>• ??? sustainable modular timber homes built</li> </ul>
Rivers, Lakes, Ponds and Canals	Develop water bodies to support recreation, tourism, urban regeneration, biodiversity and reduce flooding. <ul style="list-style-type: none"> <li>- Mon &amp; Brec Canal</li> <li>- Glamorgan Canal</li> <li>- Rivers</li> <li>- Ponds</li> <li>- Lakes</li> </ul>	<ul style="list-style-type: none"> <li>• ??km canal restored</li> <li>• ???% of rivers moving from poor or fair to good quality under the Water Framework Directive</li> <li>• % of open water</li> <li>• % of river accessible for walking and fishing</li> <li>• % of water available for adventure sport</li> <li>• % reduction in the incidence of fluvial flooding</li> <li>• % of river access in town centres to boost footfall and property values</li> </ul>
Control of Invasive Species	Targeted action to eradicate invasive species such as Japanese Knotweed and Himalayan Balsam which reduce land biodiversity and values, the saleability of property and commercial land development opportunities.	<ul style="list-style-type: none"> <li>• £% area of contaminated land cleared</li> <li>• Mapping of existing areas affected by Japanese Knotweed on an annual basis</li> </ul>
Specific Landscape Scale Initiatives	Support for area based opportunities which focus on a specific geographical area:  Blaenavon World Heritage Site Glamorgan Heritage Coast Gwent Levels Wye Valley AONB Llanthony Trothy	<ul style="list-style-type: none"> <li>•</li> </ul>
		<ul style="list-style-type: none"> <li>•</li> </ul>
		<ul style="list-style-type: none"> <li>•</li> </ul>
		<ul style="list-style-type: none"> <li>•</li> </ul>

## Links to other Programmes, Projects and Investments:

*Explanation: Will your project have a significant link to other programmes, projects and / or Investments which could be deemed complementary to the success of the project:*

### **Valleys Regional Park**

The project builds on the legacy of the Valleys Regional Park which invested over £30M into environmental and tourism infrastructure across the wider Valleys area. The latter is identified as an exemplar project in the current City Region Regional Strategic Framework, the Welsh Governments Vibrant and Viable Places Framework, WEFO's Economic Prioritisation Framework for 2014-2020 ESI Funding and the recently produced Natural Resources Wales Communities and Regeneration Enabling Plan 2015 - 2020.

### **Urban Regeneration**

The polycentric nature of the region offers enormous potential to maximise the benefits offered by the close proximity of high-quality countryside and environmental assets to a large proportion of the population. Working with natural resources through a green infrastructure approach could contribute greatly to the liveability of the urban centres and housing providing sustainability and resilience through enhanced ecosystem services providing for example, increased adaptation to climate change helping to reduce flood risk and improved public health and wellbeing, as well as making them more pleasant places for residents and visitors.

Successful cities and city regions are increasingly recognising and adopting this approach as vital to the welfare of their citizens as well as their economic competitiveness. Bristol has been awarded the prestigious title of European Green Capital 2015 by the European Commission recognising its success as a green city with a high quality of life for all, including environmental and business outcomes with "a shared vision to justify its position as England's greenest, most innovative and most vibrant city."

Meanwhile, Birmingham has become the first British city invited to join the global network of so-called 'biophilic cities', which are celebrated for their green credentials, open spaces, and links to nature. Importantly, the Cardiff City Region is not Bristol, or inner Birmingham, or Manchester. A major characteristic feature of our region and difference from those above, is that the natural environment abuts and envelopes the built environment of the towns and villages, even the most built-up ones, such that they and their communities already enjoy an intimate relationship with it.

A growing number of successful City Regions around the world are working with their natural environmental assets to help them achieve, maintain, and develop their economic competitiveness:

- Within the Øresund region, an initiative that has had a major impact at a local level is the Ekostaden Augustenborg programme in the city of Malmö. Built primarily in the 1950's, Augustenborg is a neighbourhood that has experienced periods of significant socio-economic decline in recent decades, exacerbated by environmental issues such as frequent floods caused by overflowing drainage systems. Between 1998 and 2002, the Ekostaden Augustenborg project sought to reverse its fortunes and alter perceptions of the neighbourhood based on working with its natural environment. The project undertaken by the city council and the local social housing company with the extensive collaboration and participation of the area's residents, created sustainable drainage systems (SUDS), green roofs, and green spaces. As a result, the project reduced rainwater runoff rates by half, whilst the increased and enhanced green spaces greatly improved the image of the area with the turnover of tenancies decreasing by almost 20% thereby relieving some of the economic burden on the city council and the local social housing company.
- With over 2.7 million people and covering an area of 1410.80 square miles, the Stuttgart City Region is one of the most successful in the world economically and was recently ranked 11th in the 2013 EU Regional Competitiveness Index. Regional landscape planning is absolutely crucial to the development of the Stuttgart City Region and is considered as vital as investment in the improvement of grey infrastructure such as roads and rail networks. The main mechanism for delivering the Stuttgart City Region's Green Infrastructure strategy has been the development of its Landschaftspark or Regional Landscape Park concept. In Germany, Regional Landscape Parks such as those in Stuttgart and the Ruhr Metropolis, where the Emscher Landscape Park has become a world-famous attraction, are becoming increasingly popular as a means to organise fragmented landscapes and connect decentralised landscape projects to provide social and

economic as well as environmental benefits. In addition to creating recreational opportunities, the Regional Landscape Parks in Stuttgart also increase the region's competitiveness as a business location, support its economic development, and contribute vitally to the management of climate change.

- Within the UK, the Manchester city region is perhaps the best developed both in terms of its governance arrangements and its collective ambition and vision 'to pioneer a new model for sustainable (inclusive) economic growth based around a more connected, talented and greener city region'. It views a positive approach to its Green Infrastructure as imperative to achieving that vision and enabling its sustainable economic growth. A report commissioned for the Association of Greater Manchester Authorities (now part of the Greater Manchester Combined Authority) indicated that by 2020 the economic impact upon the Greater Manchester region from flooding could be as great as £20 billion. (Deloitte 2008) Consequently, the Green Infrastructure framework they developed has flood risk management and climate change adaptation as one of its major focuses.
- The Liverpool City Region Green Infrastructure Partnership comprises seven local authorities, including Liverpool City Council. Working in conjunction with Forestry Commission England and Natural England, the Partnership has developed a Green Infrastructure (GI) Framework and draft GI action plan for the City Region which also encompasses parts of Cheshire including Warrington. Their assessment of the region's natural assets underpin around 16,000 jobs which generate £700m per year GVA for the wider city region while the ecosystem services provided for society and the economy are worth over £100 billion annually.
- The Central Scotland Green Network is one of 14 National Developments in the Scottish Government's National Planning Framework. It aims to change the face of Central Scotland through a programme of strategic greenspace enhancements to achieve multiple benefits as it increasingly delivers transformational projects on the ground.

Better flood risk management is vital as we have seen in the UK in recent years in the Thames Basin and Somerset Levels for example. Urban areas are at an increased risk of pluvial flooding from surface water runoff due to impermeable surfaces and there are many ways that an expansion of urban green space can reduce run-off and increase natural infiltration to help control flooding at its source including the planting of trees, the provision of green roofs, and Sustainable Drainage Systems (SuDS). The opportunities extend well beyond town centre regeneration with many of the most socially deprived housing estates built around 50 years ago situated on exposed hillsides that suffer from high rainfall and issues of water runoff.

### **Tourism/Destination Management**

The natural resources of the City Region create a significant draw to support tourism, providing a setting for other attractions, an attraction in itself and managed routes and trails that allow visitors to explore our amazing landscapes, nature reserves and heritage sites, and participate in adventure sports activity. The partnerships we have in place with organisations such as Commoners and Ramblers organisations provide the potential for activity/knowledge based holidays/short breaks eg Hill Farm Experience, practical Conservation Breaks and the wider enhancement of natural resource based tourism product.