Proposal of key investment priorities for the LEP - Revised DRAFT 3.0

The LNPs of Plymouth, Devon and Somerset, have been working together to define the themes for their investment priorities. These themes support the aims of the Heart of the South West Local Economic Partnership (LEP) to support businesses to increase the number of jobs, value add, and skills, in order to promote prosperity in the wider community. The LEP's four strategic priorities[1] are:

1. Drive productivity and enterprise
2. Attract new business and investment
3. Maximise employment opportunities
4. Promote infrastructure to connect with markets

The LNPs jointly propose five priorities for investment that would fit the LEP's strategic priorities:

1. **Water**; managing water resources to improve infrastructure to secure business investment, and to protect against loss of productivity and loss of competitiveness
2. **Utilising natural assets to support growth and to provide essential services**; to promote infrastructure that supports development (e.g. housing, business parks), and to attract new business and investment
3. **Sustainable food production**; to stimulate innovation, increase productivity and competitiveness, secure business investment, to maximise employment opportunities (skills, apprenticeships), and to promote infrastructure to connect to markets.
4. **Low carbon**; to stimulate innovation, attract new business and investment, increase skills and employment opportunities, and promote infrastructure to connect with markets.
5. **Enterprises reliant on a high quality environment**; to stimulate innovation, securing business investment, maximise employment opportunities, and promote infrastructure to connect with markets.

This short paper provides a 1 page overview for each investment priority, explaining the following:

- A) A description – what is it?
- B) Who are the 'buyers/beneficiaries' and 'sellers/providers'?
- C) Economic benefits in terms GVA, jobs, skills and infrastructure
- D) Social and other benefits
- E) Risk, i.e. what/if this were not considered as an investment priority
- F) Links with EU themes

1. Water

A) Description – what is it?
The LNPs will work closely with The Heart of the South West LEP to support their priority to reduce the impact of flooding, and with Upstream Thinking partners to maximise the economic and environmental benefits of providing clean water. [2,3] **Mitigation against flooding;** Flooding has a major impact on people, businesses and communities, in terms of physical health risks, damage to property and disruption during the recovery process. A truly *sustainable* approach to flood management is extremely cost-effective. By restoring the river catchment's natural capacity to cope with floods via its wetlands, floodplains (e.g. Somerset levels) and riverbank woodlands, the risk of flooding to settlements downstream is lowered and the need for building costly concrete defences dramatically reduced. **Protecting water resources;** Good quality water is of great value to the local populations situated along the rivers, estuaries and villages around the coast (e.g. Plymouth Ocean City). For many businesses, the quality of the water is of primary importance, e.g. fisheries (inland and marine), pharmceuticals???, and tourism industries). For Southwest Water, improving the water quality at

the source is a high priority, as it results in lower treatment costs. A steady flow in the river is essential to avoid restrictions to abstractions (in case of drought), and to maintain healthy rivers.
B) Who are the 'buyers/beneficiaries' and 'sellers/providers'?
The beneficiaries are businesses, households, Local Authorities, who would benefit from reduced flood risk. SWW would be able to reduce cost of water treatment. The providers are landowners/managers in the county. All would benefit from a secure water supply.
C) Economic benefits in terms of jobs, GVA, skills, and infrastructure
Saving costs on built flood defences: for roughly a tenth of the cost of extensive hard engineering, flood risk can be reduced if the river is allowed to behave more naturally.[4] **Avoiding the cost of flooding**; The average annual cost of damage from flooding in England is estimated at more than £1 billion.[5] These costs are borne by householders, businesses, government and others including insurance companies. In Devon, around 30,000 homes are at risk of flooding.[6] Larger population centres at risk are: Lynmouth, Exeter, Bideford, Newton Abbott, Shaldon and Ringmore.[7] Infrastructure is also at risk, including the main railway line to Penzance and to Plymouth, the A30 and A374, schools, health centres and other community assets. According to the Environment Agency, the average cost was between £23,000 and £30,000 per flooded home and a quarter of homeowners were not fully covered by insurance. The average cost incurred per flooded business was between £75,000 and £112,000, with 95 per cent of companies covered by insurance. There is also the reputational risk, i.e. the potential damage to the reputation of a business if their services are interrupted. In addition, floods cause damage to infrastructure, utilities supplies, agricultural land, and incur major clean up and repair costs for emergency services and local government. For example, the cost of flooding in 2012 was '£4m and rising' for Devon County Council[8] **Safeguarding businesses continuity**: In case of a flood, businesses could be damaged/destroyed. The loss of business can be a considerable cost. For example, the Boscastle flood event resulted in an estimated cost of £12 million of lost business (of a total of the estimated total cost of £50million). [9,10] **Cost savings on water treatment:** South West Water is investing £9.1m in Upstream Thinking between 2010 and 2015, aiming to deliver better quality raw water, avoiding the need for capital investment to upgrade treatment works and the operational expense of using large amounts of energy and chemicals to treat water. The benefit: cost ratio of this project has been calculated at 65:1 over 30 years, at a cost of just 65p per customer over five years.[11] **Safeguarding the tourism industry**: for example, in North Devon, tourism is estimated to be worth approximately 25% of the Gross Domestic Product of the District.[12] Devon has 42 beaches with 'blue flag status' (based on a number of criteria, including water quality and services available). Clean rivers are vital to the angling industry, stimulate the trade in fishing rights of salmon and sea trout, and attract tourism.
D) Social and other benefits
The benefits this will bring include: • increased resilience and adaptation to climate change • reduced health costs as flooding has a negative impact on mental health[13] • healthy bathing water benefits the health of water users (local, visitors) • improved water quality with less sediment benefits biodiversity • restored habitats for local wildlife • carbon capture and storage in soil and vegetation (in the future, a voluntary market for carbon sequestration may generate additional income)
E) Risk, i.e. what/if this were not considered as an investment priority
Cost to private businesses, households, infrastructure providers, local authorities.
F) Links with EU themes
1,3,4,5,6

2. Utilising natural assets to support growth and to provide essential services

A) Description – what is it?

Develop natural assets as part of the infrastructure in and around growth areas (e.g. Exeter and East Devon Growth Point, Plymouth), which enable cities to grow sustainably. For example, the Exeter and East Devon development is a £2billion investment programme (inc £90 million of public sector funding), to provide 20,000 new homes and over 25,000 jobs up to 2026. This development programme is to enable Exeter and East Devon to reach its full economic potential and to provide a *sustainable* way of living which will provide a solid foundation for future economic growth.[14]

This 'natural' infrastructure is essential to safeguard the investment for growth and to achieve the vision. Such infrastructure can be multi-functional and will deliver essential services:

- To provide an attractive place to live, work and visit
- To create a productive environment for workers
- To provide space for recreation (e.g. green spaces, water sports)
- To make space for water to mitigate against flooding
- To provide sustainable transport routes (walking, cycling)
- To absorb air pollution (dust particles, CO_2), reduce heat effects

B) Who are the 'buyers/beneficiaries' and 'sellers/providers'?

The buyers are the developers and local authorities, on behalf of the businesses and people who will choose to locate themselves in these new 'growth' areas.

C) Economic benefits in terms of jobs, GVA, skills, and infrastructure

- **Safeguarding the investment;** a £2 billion investment that is to provide 25,000 new jobs
- **Increase productivity:** Time 'in nature' promotes recovery from stress and attention fatigue, and has positive effects on mood, concentration and self-discipline[15].
- **Property values:** Views of natural landscapes can add up to 18% to land and property values.[16]
- **Avoiding cost of flooding:** Urban flooding costs £2*70 million a year in England and Wales.* It has been predicted that this will increase to between £1 and £10 billion a year by 2080 unless preventative action is taken[17] . Sustainable Urban Drainage Systems (SUDS) are cost-effective ways to reduce flood risk[18]***.*** SUDS involve retaining water above ground near to where it falls. The capital costs of SUDS are found to be less than half that of traditional drainage and the maintenance costs are also lower. Green roofs[19] and urban trees[20] retain rainwater reducing flood risk. Green roofs and trees can also help reduce heat retention. LNPs have valuable expertise in developing SUDS and natural assets for maximum economic, environmental and community benefit.

D) Social and other benefits

- **Physical health benefits:** Insufficient physical activity costs the UK £8.2 billion annually[21]. Walking and cycling from home are the forms of activity which are most likely to become long-term habits[22].
- **Mental health benefits:** Mental illness was estimated as a £77.4 billion welfare loss to the UK[23]. Chronic stress is a major cause of disease which is intensifying in recent decades. There is evidence which strongly suggests a long-term relationship between chronic stress and access to greenspace. The more often a person visits urban open green spaces, the less often he or she will report stress-related illnesses.[24,25]

E) Risk, i.e. what/if this were not considered as an investment priority

The £2billion investment could be at risk, if development is not 'sustainable'.

F) Links with EU themes

1,3,4,5,6,7,8,9,

3. Sustainable food production

A) Description – what is it?
The agri-food sector is much more important to Devon's economy than it is nationally (i.e. it accounts for around 13% of GVA in Devon compared to 7.6% nationally). It provides employment of 31,900 people in 'core' agri-food activities, and 22,500 in the 'Accommodation and Food' Services sector. [26,27] There are two strands to this investment priority: **1. Promote the high quality artisan food producing businesses of Devon and Somerset** There is an opportunity for a more strategic approach to facilitate the future development of the SME's in this sector. The economic survival of farms depends on running economically viable businesses, which will require diversification, e.g. through adding value to food production, possibly with a link to tourism. Innovation in the supply chain, reducing costs and improving efficiency is critical. Food businesses are likely to require support in terms of sales & marketing (e.g. marketing initiatives, certification schemes), routes to market, transportation and distribution solutions. **2. Promote application of research and skills development in sustainable landuse practices** Sustainable landuse/farming practices are good for business, as they reduce loss of soil/fertility, reduce the cost of inputs (water, fertiliser, pesticides), increase productivity, and are good for the environment. Working together with local education providers would be key, to promote skills development in sustainable farming and to spread best practice.
B) Who are the 'buyers/beneficiaries' and 'sellers/providers'?
Buyers of local food are local people and visitors, regional city centres such as Bristol and Exeter, and potentially the London market. The sellers are food producers in the rural economy.
C) Economic benefits in terms of jobs, GVA, skills, and infrastructure
Safeguarding rural employment: Over 70% of Devon's land area is farmed - of which three quarters is grassland. Over 18,500 people work directly in over 8,000 commercial farm businesses.[28] There is an increase in the number of part-time farmers, partly due to farmers needing to support their income through other means.[29] An estimated 15% of land in Devon is HNV (High Nature Value) farming, which provides important environmental (e.g. carbon sequestration, flood mitigation, biodiversity) and cultural goods and services (maintenance of cultural historic landscape, husbandry skills, field boundaries, buildings, etc).[30,31] **Promoting the Devon food brand:** Devon has a strong heritage in being seen as a 'food' county, with considerable consumer loyalty to Devon's local and high quality products. **Multiplier effect in the local economy**: The New Economics Foundation has estimated that every pound spent on local food can have a multiplier effect, making it worth £2.50 to the local economy.
D) Social and other benefits
• Developing rural skills, including marketing skills • Continuation of HNV farming resulting in a range of public benefits (e.g. flood mitigation, clean water, landscape value, cultural heritage, biodiversity)
E) Risk, i.e. what/if this were not considered as an investment priority
Loss of food tradition and Devon brand, loss of farming businesses and employment, loss to rural communities, loss of landscape, cultural heritage, and biodiversity
F) Links with EU themes
Theme 1,2,3,4,5,6,7,8,9,10

4. Low carbon

Low carbon energy is one aspect of a low carbon economy. Devon & Somerset could make use of its natural assets for energy generation, including: hydro, marine renewables (e.g. wave & tidal power), wood fuel, and other biomass (e.g. wetland biomass production at the Avalon Marshes).
Below is a case study on wood fuel in Devon.

Wood fuel

A) Description – what is it?
The wood fuel economy has the potential to generate additional jobs and GVA in the SME sector. 11.5% of Devon is woodland, covering 77,000 hectares and 88% of this is in private ownership. However, 60% of Devon's woodlands are under managed. [32] Innovation in this sector could increase local employment and bring multiple benefits, by encouraging co-operative action by groups of farmers and owners of small woodlands to bring their woodlands into sustainable management, and to promote the use of home-grown wood as a source of renewable energy.
B) Who are the 'buyers/beneficiaries' and 'sellers/providers'?
The buyers of wood fuel are domestic and non-domestic users of wood fuel to heat homes and public buildings. The providers are the woodland owners/farmers, while sellers would be contractors, wood processors, and local retail outlets.
C) Economic benefits in terms of jobs, GVA, skills, and infrastructure
GVA and Jobs in the wood fuel industry The economic value of the woodfuel industry in the UK economy is estimated to grow to £1 billion of gross value added (GVA) and lead to the creation and support of 15,300 jobs in the UK economy by 2020, according to a study for the Forestry Commission by the Centre for Economic Research Ltd.[33] For Devon, this could mean that the value of wood fuel production could grow between 2010 and 2020 by £4million GVA and 74 jobs. This calculation was based on using GVA and employment figures for England, and applying these to the number of hectares of woodland in Devon. This includes direct employment in growing, harvesting and processing, plus indirect employment such as haulage, training and professional services. Note: This estimate does not include the additional employment and GVA for energy production and the manufacturing and installation of woodfuel boilers/installations. This would generate an additional increase in GVA, but a large proportion of that would be generated outside Devon. **Opportunity for farm diversification:** Wood fuel production may also provide a diversification option for small farms. For example, in Brittany (France), small dairy farms are viable thanks to supplementary income from woodfuel production by managing hedgerows and small woodlands.[34]
D) Social and other benefits
• An increase in jobs (e.g wood contractors) and income in deprived rural areas • Skills and training opportunities for young people who have an aptitude for practical work • Diversification opportunity to increase income for small, low income farms • Reducing dependency on imported fuel • Reducing carbon emissions • Woodlands can be used for recreation, providing health benefits • Opportunities for community involvement (e.g. woodland co-operatives) • Improving biodiversity
E) Risk, i.e. what/if this were not considered as an investment priority
Insufficient jobs for young people, resulting in unemployment and young people leaving the local rural economy.
F) Links with EU themes
Theme 1,2,3,4,5,6,7,8,9,10,11

5. Enterprises reliant on a high quality environment

A) Description – what is it?
Investment in specific rural areas which have high value natural assets and potential for economic growth by attracting enterprises that rely on the high quality of the natural environment, such as: • Creative industries (art, culture, design) • Leisure, high value tourism, and education enterprises • Rural enterprises (high quality food production) These are investments in innovative projects and business support, to create additional employment in a range of different businesses, provide skills development, and diversification opportunities for farmers. Is this the correct definition? Examples in Devon and Somerset would include the National Parks, AONBs, Brue Valley and the Avalon Marshes (Somerset).
B) Who are the 'buyers/beneficiaries' and 'sellers/providers'?
The sellers/providers are SMEs in the rural economy and the buyers/beneficiaries are local communities, as well as the people who visit.
C) Economic benefits in terms of jobs, GVA, skills, and infrastructure
Areas of high nature value can be a 'promoter', rather than a 'barrier' for economic development and prosperity. For example, in National Parks, the approval rate of planning applications in National Parks is in line with the National average (89%, compared to 87% for England as a whole), which is partly due to expert pre-planning advice by the National Park Authorities to ensure development is sustainable. 70% of the working age population is economically active, in line with the national average. Unemployment is 2%, lower than the national average. The number of businesses per unit of population is twice the national average, a reflection of the number of small businesses in the National Parks.[35] **Increase economic contribution in terms of GVA, jobs and skills.** There is much evidence about the economic contribution that such place-based investments can generate. For example, economic research on the contribution that 10 RSPB reserves make, show that they support 435 jobs, of which 66% is supported by visitor spending. For example, Minnesmere nature reserve showed that investment in visitor facilities (including a RSPB shop, tearoom, toilets, eight hides and three miles of visitor trails) has more than doubled visitor numbers from 39,000 in 1986 to over 80,000 visitors in 2009, supporting 103 local FTE jobs in 2009, an increase of 76% since 2002.[36] The Great Fen Project in Cambridgeshire is expected to "generate between £1.4 - 3.25 million turnover annually, creating between 24-59 direct new jobs, and provide significant skills development and volunteering opportunities"[37]
D) Social and other benefits
Address social exclusion issues: by providing opportunities for education, skills development and volunteering, social exclusion issues can be addressed. These programmes can help NEETS[*], young offenders, unemployed, people with mental health problems, people with learning disabilities to lead more productive lives. For example, Wiltshire Wildlife Trust worked with local partners to develop a programme of training and work experience for 240 young people, which had a 70% success rate (i.e. 70% did not return to benefits).[38] These places play an important role in protecting and enhancing the natural environment and biodiversity, as described in priority 1 (water), 3 (sustainable food production), and 4 (low carbon).
E) Risk, i.e. what/if this were not considered as an investment priority
Risk is that certain rural areas will not benefit from economic development
F) Links with EU themes
1,3,4,5,6,8,9,10,11

[*] A young person (16-18 year olds) Not in Employment, Education or Training

The LNPS also offer to be supportive partners by providing valuable expertise on sustainable economic development and the use of natural resources, leveraging funding, and delivering successful community programmes.

Esther Kieboom
Environment & Economics

Office: 01736 – 785612 / Mobile: 077 – 4094 4599 esther.kieboom@btinternet.com www.kieboom.co.uk

[1] http://www.heartofswlep.co.uk/sites/default/files/business_plan-hotsw.pdf
[2] Devon Local Nature Partnership, A short guide to our plan (DRAFT), 2013
[3] Naturally Somerset, A prospectus from the Local Somerset Nature Partnership (DRAFT), 2013
[4] Slowing the flow, a natural solution to flooding problems, WWF Scotland
[5] Investing for the future, The Environment Agency, 2009
[6] Environment Agency
[7] Southwest Observatory
[8] BBC Devon, 14 July 2012
[9] Note: The Boscastle example is only used to illustrate the magnitude of loss to businesses; not to draw any other conclusions in terms of whether this flood could have been prevented.
[10] 'Boscastle's flood loss estimated at £50m' The Independent, 20 August 2004.
[11] http://www.sww-cr-report-2012.com/environmental-sustainability/upstream-thinking/
[12] North Devon Local Plan – Adopted July 2006
[13] The effects of flooding on mental health, Health Protection Agency, 2011
[14] http://www.exeterandeastdevon.gov.uk/Vision/
[15] HEALTH COUNCIL OF THE NETHERLANDS 2004.
[16] SWRA
[17] PARLIAMENTARY OFFICE OF SCIENCE AND TECHNOLOGY 2007. Urban flooding
[18] DUFFY, A, JEFFERIES, C, WADDELL, G, SHANKS, G, BLACKWOOD, D & WATKINS, A 2008. A cost comparison of traditional drainage and SUDS in Scotland. *Water Science & Technology, 57*, ***1451-1459***
[19] MENTENS, J, RAES, D & HERMY, M 2006. Green roofs as a tool for solving the rainwater runoff problem in the urbanized 21st century? *Landscape and Urban Planning, 77*, ***217-226.***
[20] XIAO, Q, MCPHERSON, EG, SIMPSON, JR & USTIN, SL 1998. Rainfall interception by Sacramento's urban forest. *Journal of Arboriculture, 24*, ***235-244.***
[21] CHIEF MEDICAL OFFICER 2004. At least five a week: Evidence on the impact of physical activity and its relationship to health. DEPARTMENT OF HEALTH.
[22] HILLSDON, M & THOROGOOD, M 1996. A systematic review of physical activity promotion strategies. *British Medical Journal, 30*, ***84.***
[23] THE SAINSBURY CENTRE FOR MENTAL HEALTH 2003. The economic and social costs of mental illness.
[24] GRAHN, P & STIGSDOTTER, UA 2003. Landscape planning and stress. *Urban forestry & urban greening, 2*, ***1-18.***
[25] NIELSEN, TS & HANSEN, KB 2007. Do green areas affect health? Results from a Danish survey on the use of green areas and health indicators. *Health & Place, 13*, ***839-850.***
[26] Matt Lobley, Jo Trail Thomson and Donald Barr, A Review of Devon's Food Economy, Exeter University, Centre for Rural Policy Research, June 2012
[27] BRES data
[28] NFU
[29] Centre for Rural Policy Reasearch Exeter University
[30] Cummulus Consultants, High Nature Value farmland in Rural Development policy Culm Grasslands Case Study, 2011
[31] European Forum on Nature Conservation and Pastoralism, High Nature Value Farmland in Devon Overview of main findings, draft 24/03/11
[32] http://www.forestry.gov.uk/newsrele.nsf/WebPressReleases/071D85E331BEDA69802576E0005083AE
[33] The economic value of the woodfuel industry to the UK economy by 2020, centre for economics and business research ltd, 2010
[34] Cordiale Project
[35] Cumulus Consultants, Valuing England's National Parks, 2013
[36] RSPB Reserves and Local Economies 2011
[37] The Great Fen Project - Socio-economic Study, 2012
[38] Wiltshire Wildlife Trust - The Future Jobs Fund, March 2011