Woodlands for Wales Action Plan

"Woodlands for Wales"

The Welsh Governments Strategy for Woodlands and Trees

Woodlands for Wales Action Plan

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Minister's foreword

I am very pleased to be providing the foreword for the *Woodlands for Wales Action Plan*. This Action Plan sets out the action and activities that are planned to make progress towards achieving the vision and outcomes of our 50-year *Woodlands for Wales* Strategy. I want to thank all those who have engaged in the preparation of the Plan, particularly the Woodland Strategy Advisory Panel for their independent input.

High-quality, resilient and healthy woodlands provide real social and community benefits for the people of Wales. This results in a better quality environment and makes a significant contribution towards tackling poverty and creating opportunities associated with green growth for employment and income generation. As well as adapting to climate change themselves, woodlands and trees help Wales respond to the effects of climate change through woodland creation and the wider use of Welsh timber for sustainable construction.

There is no doubt that woodlands and trees are a valuable natural resource that can help to meet the needs of people and communities. Through the actions in this Plan, we aim to make our woodlands more diverse and resilient and to increase woodland planting in order to realise the social, environmental and economic benefits that woodlands and trees can provide, now and in the future.

The Natural Resources Policy Framework is developing as a means of planning and prioritising the opportunities presented by natural resources in Wales. Woodlands and trees are a key asset and make up a significant part of our natural resources contributing towards the goals to improve the well-being of Wales that have been given statutory effect by the Well-being of Future Generations (Wales) Act 2015. This Plan will help to take forward the wider policy context for Wales' natural resources.

Everyone with an interest in woodlands and trees will want to see the vision and outcomes of *Woodlands for Wales* achieved. I am grateful to all those who have agreed to progress this Plan and we are now all challenged to deliver the actions to ensure that woodlands provide real benefits for today's and future generations.

Carl Sargeant AM

Minister for Natural Resources

PART 1

"*Woodlands for Wales*" – Synopsis of the Welsh Government's Strategy

1. "*Woodlands for Wales*" is the Welsh Government's fifty-year strategy for woodlands and trees in Wales. It was originally published in 2001 and revised in March 2009. It sets out the Welsh Government's policy aims and objectives for *all* woodlands and trees in Wales, namely those in public and private ownership and whether in rural, peri-urban or urban environments.

2. "*Woodlands for Wales*" recognises that the management of woodlands and trees is a long-term activity capable of providing a range of social, economic and environmental benefits to the people of Wales, including making a significant contribution towards mitigating the impact of climate change. Forestry, woodlands and trees are a key part of the more holistic approach to managing Wales's natural resources in a more proactive, sustainable and joined-up way. This approach is being developed in the Environment (Wales) Bill. Because of the range of benefits that they can provide, Wales's trees will contribute to achieving the well-being goals set out in the Well-being of Future Generations (Wales) Act 2015, helping to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Wales's trees are therefore an important asset contributing to the delivery of Welsh Government priorities of **driving green growth**, **resilience and safety** and, in particular, **tackling poverty**.

3. The foundation of "*Woodlands for Wales*" is the concept of sustainable forests, woodlands and trees delivering a full range of benefits. The Ministerial Conference on the Protection of Forests in Europe[1] defined sustainable forest management as "*the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local national and global levels, and does not cause damage to other ecosystems*". The sustainable management of Wales's forests, woodlands and trees is the basis on which they can then contribute towards each of the wider goals in the Well-being of Future Generations (Wales) Act 2015.

4. The long-term *Vision* of "*Woodlands for Wales*" is:

> *Wales will be known for its high-quality woodlands that enhance the landscape, are appropriate to local conditions and have a diverse mixture of species and habitats.*
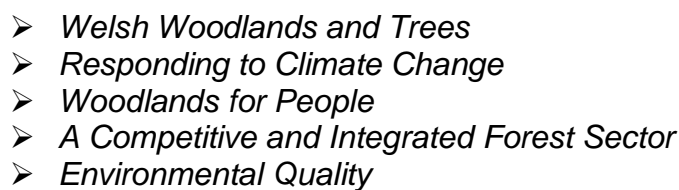
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[1] Resolution of the Second Ministerial Conference on the Protection of Forests in Europe, 16-17 June 1993.

"*Woodlands for Wales*" envisages that delivering the *Vision* will: -

- provide real social and community benefits, both locally and nationally;

- support thriving woodland-based industries; and

- contribute to a better quality environment throughout Wales.
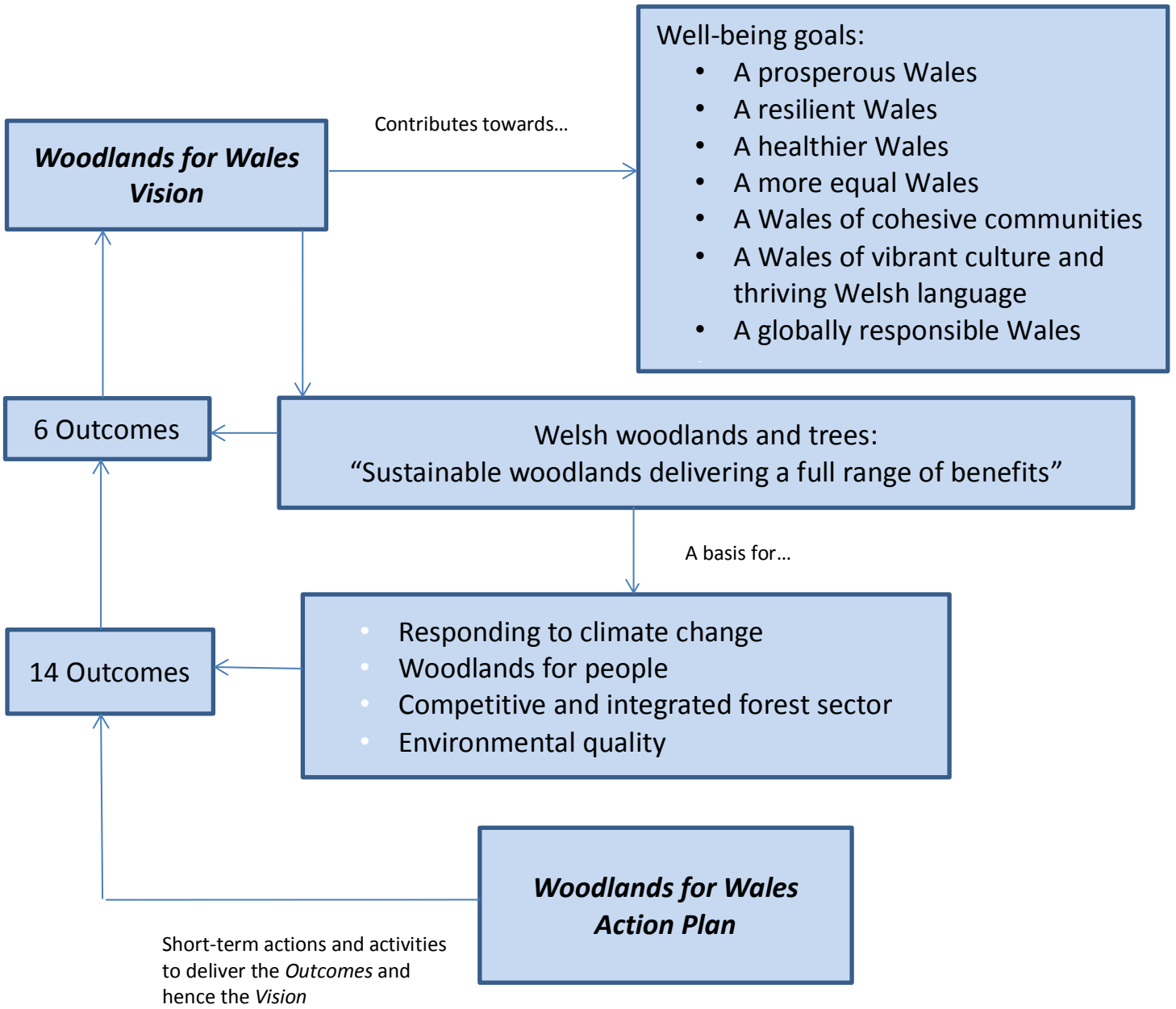
5.   "*Woodlands for Wales*" identifies 20 high-level *Outcomes* that act as a long-term focus for implementing the *Vision*. The *Outcomes* are framed around five *Themes*:

> ➢ *Welsh Woodlands and Trees*
> ➢ *Responding to Climate Change*
> ➢ *Woodlands for People*
> ➢ *A Competitive and Integrated Forest Sector*
> ➢ *Environmental Quality*

The nature, quality, distribution and management of Welsh woodlands and trees underpins the delivery of "*Woodlands for Wales*". The *Welsh Woodlands and Trees* theme is therefore the foundation supporting the other four themes which are focused around specific issues. The "*Woodlands for Wales*" *Themes* and *Outcomes* are, together with the *Vision*, set out at **Annex 1**.

6.   This *Action Plan* is designed to set out the short-term actions and activities to deliver the long-term ambitions of "*Woodlands for Wales*". It is part of a series of five-year plans that set out the actions being undertaken over the lifetime of each respective plan. Short-term actions and activities (described as "*priority actions*") are linked in this *Plan* to the high-level *Outcomes* identified in "*Woodlands for Wales*". These *priority actions* together with "*underpinning principles*" and "*delivery mechanisms*" (which are more on-going in nature and likely to continue beyond the five-year life of this *Plan* into the next and subsequent plans) form the key components of the *Action Plan*. Collectively, the components provide a focus on actions and activities to make progress towards achieving the *Outcomes* and *Vision* of "*Woodlands for Wales*".

7.   The diagram below illustrates how this *Action Plan* sets the short-term actions and activities to deliver the long-term ambitions of *Woodlands for Wales* which, in turn contributes, towards the wider well-being goals in the Well-being of Future Generations (Wales) Act 2015 (set out in detail in **Annex 2**).

Context for the "*Woodlands for* Wales *Action Plan*"

Woodlands for Wales Vision

Contributes towards...

Well-being goals:
- A prosperous Wales
- A resilient Wales
- A healthier Wales
- A more equal Wales
- A Wales of cohesive communities
- A Wales of vibrant culture and thriving Welsh language
- A globally responsible Wales

6 Outcomes

Welsh woodlands and trees:
"Sustainable woodlands delivering a full range of benefits"

A basis for...

- Responding to climate change
- Woodlands for people
- Competitive and integrated forest sector
- Environmental quality

14 Outcomes

Woodlands for Wales Action Plan

Short-term actions and activities to deliver the *Outcomes* and hence the *Vision*

PART 2
Action Plan

8.   There is wide-ranging cross-sectoral involvement and interest in forestry, woodlands and trees including: the Welsh Government; Natural Resources Wales ("NRW"); local authorities; businesses; woodland and other community groups; charities; landowners and individuals. They all have a role to play in achieving the "*Woodlands for Wales*" *Vision* and delivering the actions set out in this *Action Plan*.

9.   This *Action Plan* is built around three components which, together, focus the actions and activities of all these organisations and individuals. The components are:

Underpinning principles
The foundation for sustainable woodlands delivering a full range of benefits

Delivery mechanisms
The tools for delivery

Priority actions
A focus for short-term specific actions and activities for delivery

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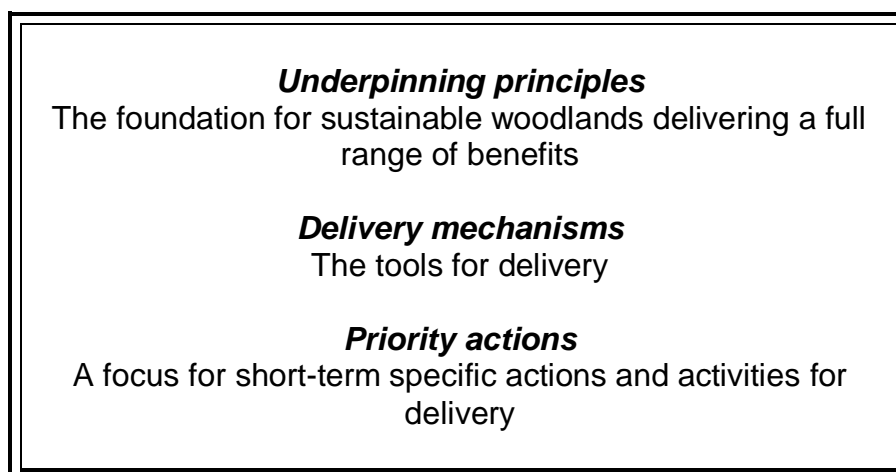
10.   This *Action Plan* runs until 31 March 2020. The ***underpinning principles*** and the ***delivery mechanisms*** are more enduring and fundamental in nature and will carry forward beyond this *Plan* into the next and subsequent plans. The ***priority actions*** are specific actions and activities to be actioned during the period of this *Plan*. There may not always be clear dividing lines between these three components and particular matters could fall within one, two or even all three of them. For example, reference to the UK Forestry Standard is included in this *Plan* as supporting the *underpinning principle* of "sustainable forests and woodlands". Adherence to the Standard also demonstrates "best practice", one of the *delivery mechanisms*. Therefore, ***underpinning principles***, ***delivery mechanisms*** and ***priority actions*** are not mutually exclusive components. They are very much interlinked and together in this *Plan* provide a focus for activity to achieve the *Outcomes* and *Vision* of "*Woodlands for Wales*".

11.   The significance of the ***priority actions*** is that they are those specific actions that will be undertaken in the short-term (up to 5 years) over the life of this

Plan. They are linked to the "*Woodlands for Wales*" *Outcomes* and progress against them will be reported annually.

12. The ***underpinning principles***, ***delivery mechanisms*** and ***priority actions*** are set out below.

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<u>Underpinning principles</u>

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The foundation for sustainable woodlands delivering a full range of benefits

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13. The ***underpinning principles*** are the key principles that provide the framework and context for the delivery of the specific *priority actions* set out in this *Action Plan*. By their nature, they are of a more enduring character and they will continue beyond this *Plan* into the next and future iterations.

14. The ***underpinning principles*** *are: -*

- ***Sustainable management of natural resources*** to maintain and enhance the resilience of Wales's ecosystems, their ability to mitigate for and adapt to the impacts of climate change and their capacity to provide benefits for the people, environment and economy of Wales, in the present and in the future.

- ***Sustainable forests and woodlands*** *as defined by the following documents:*

  ➢ UK Forestry Standard;

  ➢ UK Woodland Assurance Standard.

- **International commitments:**

  ➢ Wales's contribution to UK, European and Worldwide commitments to sustainable management of forest ecosystems, for example under the Ministerial Conference on the Protection of Forests in Europe and the European Landscape Convention.

- *Multiple benefits of forestry, woodland and trees over the short, medium and long terms such as:*

  - timber;

  - carbon capture;

  - water management;

  - green energy;

  - business development and social enterprise;

  - education and skills;

  - recreation and access;

  - health and well-being; and

  - bio-diversity and other ecosystem services.

- *Increasing woodland cover in Wales*

  - to optimise the sustainable benefits that forestry, woodlands and trees can provide across rural, peri-urban and urban areas to meet the needs of people and local communities; and

  - integrating the management of forestry, woodlands and trees with other land uses to build resilience.

- *Working together to access opportunity:*

  - Welsh Government;

  - Natural Resources Wales;

  - Participants[2] in the delivery of the "Welsh Forest Resource Ten Areas for Action" Plan.

 - woodland and other community groups;

  - local authorities;

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[2] Welsh Government, NRW, Confederation of Forest Industries and Wales Forest Business Partnership.

> ➢ registered social landlords;

> ➢ businesses;

> ➢ charities;

> ➢ landowners; and

> ➢ individuals.

- *Monitoring:*

  > ➢ through the proposed statutory framework for the sustainable management of natural resources;

  > ➢ *Woodlands for Wales* Indicators and surveys;

  > ➢ National Forest Inventory;

  > ➢ Glastir monitoring and evaluation programme;

  > ➢ *Action Plan* reporting/review; and

  > ➢ other evidence.

Delivery mechanisms

The tools for delivery

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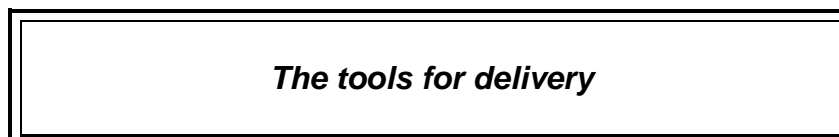
15.   The **delivery mechanisms** are the principal tools for delivering the specific *priority actions* set out in this *Action Plan*. Like the **underpinning principles**, *the* **delivery mechanisms** are enduring in nature and will continue beyond this *Plan* into the next and future iterations.

16.   The **delivery mechanisms** are: -

- **The proposed delivery tools for the sustainable management of natural resources,** *such as*:

- **Carbon budgeting** to drive delivery of Wales' contribution to the 2050 target for reducing greenhouse gas emissions;

- **State of Natural Resources Reporting** providing the evidence base to identify opportunities to improve the resilience of Wales' natural resources and to maximise the long term social, economic and environmental benefits that they provide to drive green growth;

- **National Natural Resources Policy**, setting out the high-level direction of travel for all natural resources related policy in Wales;

- the **Area Based Approach** planning and priority setting process that co-ordinates resource use so that long-term sustainable benefits are optimised for the people, environment and economy of Wales in the present and in the future; and

- **Planning Policy Wales**, the national planning policy framework to safeguard existing and introduce new green infrastructure as part of new development in order to promote sustainability, economic growth and the health and well-being of our communities.

- *Existing environmental legislation:* functions, duties and powers under legislation including the Forestry Act 1967 and the Plant Health Act 1967.

- *Best practice:* including forest management planning adhering to the principles of the UK Forestry Standard.

- *Incentives:*

  - timber production;

  - primary and secondary processing;

  - green energy;

  - carbon capture;

  - cultural and social services and benefits;

  - payments for ecosystem services; and

  - public sector support (RDP and Glastir, ERDF and ESF funding, Europe 2020 funding, LEADER, LIFE and other grant funding).

- *Policy, information and guidance* including:

  - National Natural Resources Policy;

  - Climate Change Strategy for Wales;

  - *Woodlands for Wales*;

  - Nature Recovery Plan for Wales;

  - Planning Policy Wales and the supporting suite of Technical Advice Notes;

  - Social policies including child poverty, tourism and vibrant and viable places regeneration framework;

  - Farming Connect;

  - UK Forestry Standard;

  - UKWAS; and

  - Glastir advocacy.

- *Management of the Welsh Government Woodland Estate:*

  - exemplar of good forestry practice;

  - opportunities to test research and best practice; and

  - NRW Corporate Plan and annual Business Plan priorities.

- *Research and evidence:*

  - sound science and robust evidence supporting the delivery of sustainable forests and woodlands.

- *Joined up working:*

  - working together to deliver agreed outcomes;

  - creating links between initiatives to maximise available funding and benefits;

  - working with other land-use sectors towards integrated land-use.

Priority actions

> **A focus for short-term specific actions and activities for delivery**

17. Within this *Action Plan* there are fourteen **priority actions**. They provide a short-term focus on the specific actions to be delivered over the life of this *Action Plan*. Each year, progress against the *priority actions* will be monitored and reported on. Part 3 – *Monitoring and Reporting* – explains how this will be done.

18. New *priority actions* might be identified as circumstances change over the period covered by the *Plan*. But no *priority action* will be removed until it has been reported on.

19. The fourteen *priority actions* appear below and they are grouped under the following six areas: -

    - ***Tree health***

    - ***Supporting woodland creation and management***

    - ***Enhancing the management and production of Welsh timber and its economic benefits***

    - ***Improving the condition of woodlands and trees***

    - ***Non-timber value of forestry, woodlands and trees***

    - ***UK cross-border working***

20. A consistent format is used for setting out the *priority actions:*

    - a brief overview providing an introduction for each area and for each *action;*

    - details of the lead organisation and partners, which together will drive delivery of the action;

- the evidence base for the *action;*

- the activity required to deliver the *action*; and

- progress against the *action.*

In addition, set out under each area are the wider well-being goals that the *priority actions* in that area make a contribution towards delivering.

21.   A summary list of the *priority actions* is set out below (pages 15 to 18) followed by the detail for each action (pages 19 to 48). Representatives of the woodland sector and other stakeholders participated in a "*Driving Delivery*" workshop on 15 October 2015. The purpose of the workshop was to engage with stakeholders on driving delivery of the 100,000 hectare woodland creation aspiration and the *priority actions* set out in this *Action Plan*. The deliberations of delegates at the workshop have been incorporated into the commentary on the *priority actions* set out below.

Priority Actions – Summary List

Area	No	Priority Action	"W4W" Outcomes	Contribute towards: Well-being goals
Tree Health	1	Develop and maintain a risk register of pests and diseases and their threat to tree health in Wales.	1; 2; 3; 16; and 18	• **a prosperous Wales**; • **a resilient Wales**; • **a healthier Wales**; and • **a globally responsible Wales**.
	2	Implement the Phytophthora ramorum recovery programme.		
Supporting woodland creation and management	3	Use the statutory and policy framework in Wales to deliver woodland creation to optimise the benefits provided by forestry, woodland and trees.	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 18; 19; and 20	• **a prosperous Wales**; • **a resilient Wales**; • **a healthier Wales**; • **a more equal Wales**; • **a Wales of cohesive communities**; and • **a Wales of vibrant culture and thriving Welsh language**.
	4	Manage woodland planting and current and future harvesting programmes to ensure long-term continuity of timber production.		
	5	Deliver increased and safeguard existing tree cover in towns and cities and support sustainable urban tree management.		

Area	No.	Priority Action	"W4W" Outcomes	Well-being goals
			Contribute towards:	
	6	Explore the issues associated with enabling and building the capacity of community groups and enterprises to be involved in woodland management in order to help them use woodlands to realise well-being goals.		
Enhancing the management and production of Welsh timber and its economic benefits	7	Promote the uses and utilisation of Welsh timber, including as an essential material for sustainable construction central to the delivery of new housing.	1; 7; 8; 9; 11; 12; 13; and 15	• **a prosperous Wales**; • **a resilient Wales**; • **a more equal Wales**; • **a Wales of cohesive communities**; and • **a globally responsible Wales**.
	8	Develop models for woodland related enterprises and provide opportunities for employment, education and training across the forestry sector by developing sector relevant skills and providing work experience as pathways to employment.		
Improving the condition of woodlands and trees	9	Examine the adequacy of and scope to improve existing measures and procedures for the protection of valued trees, particularly ancient, veteran and heritage trees.		

Area	No.	Priority Action	"W4W" Outcomes	Contribute towards: Well-being goals
	10	Continue to bring identified special sites, Plantations on Ancient Woodland Sites ("PAWS"), native woodlands and priority habitats into favourable management on WGWE and encourage private landowners to do so.	1; 2; 3; 4; 5; 6; 7; 8; 10; 16; 17; 18; 19; and 20	• **a prosperous Wales**; • **a resilient Wales**; • **a healthier Wales**; • **a Wales of vibrant culture and thriving Welsh language**; and
	11	Develop, promote and implement programmes to manage invasive non-native species which damage woodland habitats.		• **a globally responsible Wales**.
Non-timber value of forestry, woodlands and trees	12	Gather evidence to measure and evaluate the non-timber value of forestry, woodlands and trees in Wales.	3; 6; 8; 9; 10; and 11	• **a prosperous Wales**; • **a resilient Wales**; • **a healthier Wales**; • **a more equal Wales**; • **a Wales of cohesive communities**; and • **a Wales of vibrant culture and thriving Welsh language**.
	13	Promote and enhance access to forestry and woodlands for more people to participate in and benefit from outdoor recreation experiences more often. Target resources in areas where the health, well-being and economic benefits will have the greatest impact.		

Area	No.	Priority Action	"W4W" Outcomes	Contribute towards: Well-being goals
UK cross-border working	**14**	Participate in the Forestry Governance Project to shape the future delivery of GB cross-border forestry functions ensuring that the needs of Wales, and of the other GB administrations, are accommodated.	2; 3; 5; 6; 13; 14; 16; and 18	**a prosperous Wales**; **a healthier Wales**; and **a more equal Wales**.

PRIORITY ACTION AREA

Tree Health

Overview

Pests and diseases have significant potential to impact on the health of trees and woodlands and to undermine the Vision of Woodlands for Wales. Over the past decade, several new pests and diseases have been found in the UK and some have become established with serious economic, social and environmental consequences. Wales's reliance on a very narrow range of tree species and the former practise of growing them in monocultures makes us particularly vulnerable to the impact of pests and diseases, as the impact of Phytophthora ramorum on larch trees has demonstrated.

The Welsh Government's Tree Health Strategy aims to "preserve the health and vitality of trees and woodland in Wales through strategies which exclude, detect and respond to existing and new pests and pathogens of trees, whether of native or exotic origin". Delivery of the Strategy is managed by the Wales Tree Health Steering Group. The Group comprises of representatives of the Welsh Government, NRW, ConFor, Wales Environment Link and others with expertise in this area. Its purpose is to advise and support the Welsh Government to develop its strategic response to outbreaks of pests and diseases affecting trees, including their impact on plants in the wider environment. Specific approaches to the management of P.ramorum and Chalara dieback of ash (Hymenoscyphus fraxineus) have already been put in place in response to the impact of these diseases in Wales. In addition, the Nature Recovery Plan for Wales will set out goals for supporting Wales's biodiversity and building resilience of Wales's ecosystems.

Priority Action 1:	*Develop and maintain a risk register of pests and diseases and their threat to tree health in Wales.*
Lead and Partners:	Wales Tree Health Steering Group; WG; NRW; FR; FC; APHA; ConFor; WFBP
Evidence base:	There are many pathways for pests and diseases to enter the UK and the impact of environmental factors, and particularly climate change, will have a major influence on the behaviour and population dynamics of those organisms.
	The creation and maintenance of a risk register for Wales is central to monitoring current and future threats, taking account of climate change, and informing decisions about tree species selection, effective tree health control methods and woodland management within the umbrella of sustainable woodland management and woodland certification.

The risk register will enable timely development of disease management strategies in response to any emerging biotic threat to woodlands and trees in Wales.

WG/NRW will participate in the GB and NI Tree Health Advisory Group to ensure that Wales has access to the latest information about management approaches to pests and diseases across the UK countries.

"*Woodlands for Wales*" *Indicators[3]:*
- *No.8: Tree health and resilience.*

Activity required:	Core activity of WG and NRW, for example involving the aerial flights programme for surveillance; sharing of accurate information to ensure informed support from Partners.
Progress:	*To be reported annually.*

Priority Action 2:	**Implement the Phytophthora ramorum recovery programme.**
Lead and Partners:	WG; NRW; FR; APHA; ConFor; UKFPA; WFBP; Major wood processing companies
Evidence base:	*Phytophthora ramorum* (*P ramorum*) is an exotic fungus-like pathogen known to affect a wide range of host plants. It is present in a number of European countries and was first confirmed in Great Britain in 2002. Initial infections were in nurseries and gardens on rhododendrons and other shrubs and subsequent spread was slow and at a low level. In 2009 the disease was found on larch and has become widespread across western GB. The *P.ramorum* disease management strategy, developed by the Wales Tree Health Steering Group, sets out the pan Wales approach to managing the disease outbreak, accepting that due to the nature of the disease and its distribution across Wales, eradication is not an option. Whilst *P.ramorum* is a disaster for larch in Wales, and its management presents a continuing problem for the woodland sector, it is also an opportunity to improve the age structure and increase the species diversity of Welsh woodlands to meet the vision of *Woodlands for Wales*.

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[3] See Part 3 "Reporting and Review". The Indicators can be accessed at: http://gov.wales/statistics-and-research/woodlands-wales-indicators/?lang=en.

To achieve this objective, restocking of sites in response to *P.ramorum* needs to be of productive species of the right provenance that are capable of producing timber to support the forestry sector as well as biodiversity and building ecosystem resilience.

The recovery programme assesses the impact on and recovery of all infected woodlands in Wales, both publicly and privately owned, with the objective of enabling those woodlands to continue to make a positive contribution to the delivery of the Welsh Government's Green Growth agenda and *Woodlands for Wales*.

"*Woodlands for Wales*" Indicators:
- *No.1: Woodlands and trees;*
- *No.2: Diversification of woodlands;*
- *No.3: Sustainable woodland management;* and
- *No.8: Tree health and resilience.*

Activity required:	Core activity of WG and NRW; active and collaborative participation of Partners; up-to-date and accurate information; successful implementation of Glastir; lessons learnt opportunity to inform the management of any future disease outbreak including in terms of communications, use of citizen science and raising public awareness.
Progress:	*To be reported annually.*

Relationship to government priorities

Priority Actions 1 and 2 contribute towards:

- *Woodlands for Wales Outcomes: 1; 2; 3; 16; and 18.*

- *Well-being goals of: **a prosperous Wales**; **a resilient Wales**; **a healthier Wales** and a **globally responsible Wales**.*

PRIORITY ACTION AREA

Supporting woodland creation and management

<u>*Overview*</u>

Woodlands and trees, in public and private ownership and whether in rural, peri-urban or urban environments, are valuable habitats in their own right and integral to the functioning of the Welsh environment. They are often of a significant landscape value connecting people and communities to a sense of place.   "Woodlands for Wales" sets out the Welsh Government's policy to avoid the unnecessary removal of woodland and to increase woodland cover in Wales in order to ensure that trees and woodland can continue to provide the full range of ecosystem services, including woodland as a resource for people in terms of recreation, access and amenity and woodland as a source of raw material supporting a thriving forestry sector. But this is against the backdrop of Wales being one of the least wooded countries in Europe with much natural woodland being fragmented and isolated.

Almost half (46%) of woodland in Wales is certified under the Forest Stewardship Council Scheme and managed under the UK Forestry Standard and its associated suite of guidelines. The majority of this area is comprised of the public woodland estate managed by Natural Resources Wales. But a significant proportion of woodland is currently unmanaged or undermanaged. The challenge is bringing more woodland, including that which is small in scale and often fragmented, into management in accordance with the principles of the UK Forestry Standard. Improving woodland networks will support Wales's biodiversity and help build ecosystem resilience.

The right species of tree planted in the right place and properly managed can help to regulate water flow, alleviate flooding and intercept both diffuse pollution from agriculture and air pollution in towns and cities. Trees can reduce soil erosion, protect soil carbon stores and increase water percolation reducing run-off. They provide shade to livestock and watercourses, act as windbreaks and landscaping, and provide valuable habitats supporting a wide range of biodiversity. They sequester carbon and provide a renewable source of material, as well as giving rise to recreation and health opportunities.

The Wales Climate Change Strategy, published in 2010, contains an aspiration to create 100,000 hectares (ha) of new woodland between 2010 and 2030 as a means to help Wales meet its carbon emission reduction targets. The aspiration was a key recommendation of the Land Use and Climate Change Group. The recommendation was accepted by the Welsh Government as a climate change target to achieve levels of reduction in Wales green house gas emissions by long-term carbon sequestration. The aspiration required planting of 5,000ha of additional woodland cover per annum from 2010 to 2030, a higher level of planting than any ever previously achieved in Wales, including the large scale planting during the 1950s and 1960s. In 2014, the Welsh Government commissioned ADAS to review the climate change target. ADAS recommended a reduction in the target to 50,000ha of woodland creation to be delivered over 25 years up to 2040.

Both the Land Use and Climate Change Group and ADAS recommendations envisage new woodland creation at a level that is much higher than the actual achievement over recent years: between 2010 and 2015, 3,203ha of woodland has been created in Wales. The Committee on Climate change has recommended[4] that consideration should be given as to whether further measures are needed to ensure tree planting targets are met – on the basis of current achievement, there needs to be a better approach to ensuring woodland creation supports delivery of our climate change targets.

In short, woodland has the potential to create economic activity, create employment opportunities and improve the biodiversity and functioning of Wales's environment. In particular, we need to make special efforts to encourage farmers and other major land and woodland owners such as local authorities, through the Rural Communities – Rural Development Plan 2014-2020 for example, to bring their woodlands into sustainable management for biodiversity, timber, wood fuel and other environmental benefits. Such activity will provide a range of ecosystem services, as well as enabling landowners like farmers to diversify their businesses.

But woodland creation and management must be guided by the need to protect semi-natural habitats, historic features and characteristic landscapes. Whilst "Woodlands for Wales" has a strong presumption against the permanent removal of woodland, in certain circumstances it may be justified if there is a need to restore high priority open habitats.

Priority Action 3:	***Use the statutory and policy framework in Wales to deliver woodland creation to optimise the benefits provided by forestry, woodland and trees.***
Lead and Partners:	NRW; WG; FR; ConFor; WFBP; Coed Cadw; Coed Cymru; Llais y Goedwig; Local Authorities.
Evidence base:	The Welsh Government's Natural Resources Policy Framework ("NRPF") is a means of planning and prioritising natural resource management ("NRM") to capture the value of and opportunities presented by natural resources in Wales and woodlands must make a major contribution to the implementation of this approach. The Welsh Government's Environment Bill aims to put in place a legislative framework around NRPF and NRM, which will support planning for woodland creation and management in a way which takes account of a wide range benefits provided by trees. The statutory requirements outlined in the Bill therefore present an opportunity to support delivery of the woodland creation target,

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[4] Recommendation 32 of "Reducing emissions and preparing for climate change: 2015 Progress Report to Parliament" (June 2015) (https://www.theccc.org.uk/publication/reducing-emissions-and-preparing-for-climate-change-2015-progress-report-to-parliament/)

and the benefits provided by forestry, woodland and trees will need to feature strongly as this new legislation is implemented.

The Environment Bill also proposes a duty on the Welsh Ministers to ensure that in 2050 greenhouse gas emissions are at least 80% lower than the baseline levels. Interim targets are proposed in order to provide an appropriate pathway to achieve this, which will provide the direction for carbon budgets on the total amount of emissions that can be emitted in Wales. Carbon budgets will be set for specific periods, known as budgetary periods, starting for 2016-2020 and then every five years up to 2050. This aligns with the period covered by this plan, and woodland creation and management will play an important role in meeting carbon budgets, the interim emissions targets and the 2050 emission target. Carbon budgets will act as an incentive for tree planting as the costs of using trees to remove carbon compare favourably with the costs of other abatement options. Budgets will be set on the basis of the best available evidence which will in turn inform what future woodland creation targets should be.

The Wellbeing of Future Generations (Wales) Act 2015 sets a framework within which specified Welsh public bodies will seek to achieve well-being goals in order to improve wellbeing both now and in the future (see Annex 2). The Act provides for national indicators to be developed that will measure the difference being made to the well-being of Wales over time[5]. The management and creation of forestry and woodland will make a fundamental contribution to well-being and how the needs of the present are met without compromising the ability of future generations to meet their own needs.

Reference has already been made to the Wales Climate Change Strategy aspiration to create 100,000 hectares (ha) of new woodland between 2010 and 2030 as a means to help Wales meet its carbon emission reduction targets. This aspiration recognises the potential for trees and woodland to sequester carbon. The emerging statutory and policy framework in Wales will, in addition to carbon storage, emphasise the range of other benefits for society and biodiversity that trees and woodlands can provide.

The woodland sector and other stakeholders considered the climate change aspiration at the "*Driving Delivery*" workshop[6]. Tree planting was recognised as a significant measure to sequester carbon that will combine with other measures, for example peatland restoration, to contribute to meeting Wales's

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[5] The suite of national indicators is being developed.
[6] See paragraph 21.

overall carbon emission reduction target. The combined effect of such measures will have a bearing on the total number of trees and the area of woodland creation that will be required to achieve the desired reduction in carbon emissions. The carbon budgeting framework being taken forward through the Environment Bill will influence the scale of new tree planting and other measures required to balance carbon emissions.

Delegates at the workshop noted that the climate change aspiration does not recognise the other benefits that will accrue from planting the right tree in the right place for the right reasons. "Smart" tree planting will focus on the wide range of benefits that trees can provide, including carbon sequestration. Planting close to towns and cities was seen as a means of delivering community benefits including outdoor recreation and facilities for orchards, allotments and community gardens. To achieve this, different enablers, processes and incentives will be required compared to those that have traditionally been in place to support tree planting on land of low agricultural productivity. The Well-being of Future Generation (Wales) Act 2015 was seen as one such enabler, namely acting as an incentive for public bodies to collaborate with others, including the construction sector and third sector, to realise the range of benefits that trees can provide. Tree planting and woodland creation therefore has the capability to help public bodies to maximise their contribution to achieving the well-being goals set out in the Act.

Delegates concluded that a short-term goal for woodland creation will provide a focus for activity while carbon budgeting becomes established in Wales. Delegates considered that during this period there will be an opportunity to assess the level of tree planting and other measures that will be required to achieve Wales's carbon emission reduction targets, together with the timescales over which such measures will be effective in terms of their capacity to sequester carbon.

To deliver woodland creation, the Welsh Government has set a new short-term target over the life of this Action Plan of 10,000ha of new woodland to be created by 2020. This will require an average of 2,000ha of tree planting per annum. The principle tool for delivering this target will be funding through the Rural Communities – Rural Development Plan via direct funding for woodland creation and by encouraging co-operation between land owners in the public and private sectors to deliver additional tree planting. In terms of direct funding, the Welsh Government opened the revised Glastir Woodland Creation Scheme at the earliest opportunity following the approval of the Rural Communities – Rural Development Plan by the European Commission. The application window for the new Scheme has

generated a significant increase in demand compared to previous years, reflecting improvements made to the Scheme to increase its flexibility and interest to potential applicants.

The short-term target sets a challenging goal in the context of woodland creation delivered in recent years. It provides an opportunity over time to set a revised woodland creation target as the statutory and policy framework in Wales develops that recognises the range of benefits that are provided by trees – not only the volume of carbon stored by planting blocks of traditional woodland but also as a result of "smart" planting to help realise the range of ecosystem services and community benefits that woodlands and trees can provide[7].

This action recognises the opportunity to ensure that the benefits provided by trees are clearly understood and that public bodies are well placed to optimise those benefits for the long term. Indicators will steer action towards planting trees in ways which provide the greatest long term social and environmental benefit, so that trees can continue to help rural economies, lock up carbon, help to reduce flood risk, improve air quality in urban areas and provide spaces that can help improve physical and mental health.

Tools will be required to enable public bodies to make decisions that can enable these multiple benefits to be achieved. Delivery partners will need the best available advice and decision making tools to inform how they meet their wellbeing objectives through woodland creation and management.

"*Woodlands for Wales*" Indicators:
- *No.1: Woodlands and trees;*
- *No.2: Diversification of woodlands;*
- *No.3: Sustainable woodland management;*
- *No.5: Farm woodland;*
- *No.6: Urban woodland and trees;*
- *No.7: Carbon balance[8];*
- *No.8: Tree health;*
- *No.11: Recreation;*
- *No.12: Accessibility*
- *No.21: Woodland as a pressure on Water;* and
- *No.22: Woodlands as a solution for water management.*

Activity required:	Core activity of WG and specified public bodies to take forward the sustainable development principle and ensure appropriate

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[7] Cross refer to PA5 and 6.

[8] "Carbon balance" is the current indicator in *Woodlands for Wales* measuring carbon stocks in woodland soil, biomass and wood products. Carbon sequestration in forests, woodlands and trees will, in due course, be calculated in accordance with the carbon budgeting regime.

evidence and information is available to inform 'smart' tree planting.   Core activity of NRW and WG to implement the Natural Resources Policy Framework and support development and delivery of carbon budgets; WG and NRW review of the role and purpose of the WGWE; direction and leadership from partners to support implementation. With our Partners, develop tools to assist public bodies to recognise and enhance the benefits provided by forestry, woodlands and trees which support integrated Natural Resource Management and contribute to the achievement of the well-being goals, for example, the role that Public Service Boards can play to facilitate woodland creation particularly on publicly owned land.

Progress:	*To be reported annually.*

Priority Action 4:	**Manage woodland planting and current and future harvesting programmes to ensure long-term continuity of timber production.**
<u>*Lead*</u> *and Partners:*	<u>WG</u>; <u>NRW</u>; WFBP; ConFor; UKFPA; FR; forestry contractors and wood processing businesses.
Evidence base:	The forestry sector in Wales has an annual Gross Value Added ("GVA") of £499.3 million. Of this, £25.2 million can be attributed to forestry and logging, and £173.8 million can be attributed to the manufacture of wood and product. In total, the forestry sector employs between 8,500 and 11,300 people[9]. Based on existing woodland planting, harvesting plans and growth assumptions, the NFI 50-year forecast data of softwood timber availability indicates that there is a significant gap in softwood timber supplies in the medium to long-term. The reasons for this are varied including the creation of open habitats, PAWS restoration and emphasis on broadleaf planting. There is a risk that this gap may indeed broaden through the need for species diversification for forest resilience in order to both adapt to the effects of climate change and to the risks posed by tree pests and diseases. The forecast shortfall in softwood timber availability has the potential to impact on the Welsh economy in terms of less investment in the forestry sector and fewer employment opportunities created.

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[9] Woodlands for Wales Indicators release 2014-15.

Welsh Government, NRW, ConFor and WFBP have agreed "Ten Areas for Action" for Wales's forest resource and this includes an action for improved management of timber production and supply from the WGWE and the Welsh Forest Resource. The WGWE accounts for two-thirds of the conifer woodland in Wales and the review in to its role and purpose will also be relevant to the issue of improved management of timber production and supply.

There are a number of other factors to consider in addressing the matter, in particular woodland creation[10] and sustainable forest management – including the scope to bring more woodlands into production through more effective management and crop rotation cycles (such as continuous cover forestry techniques, low impact silvicultural systems or short rotation forestry techniques). Data on the properties and suitability of alternative tree species that can be planted for production forestry is also vital. All of this will need to be assessed in developing the policy in order to ensure the continuing competiveness and profitability of the forestry sector and the multiple benefits provided by Wales's forests, woodlands and trees.

"*Woodlands for Wales*" *Indicators:*
- *No.1: Woodlands and trees;*
- *No.3: Sustainable woodland management;*
- *No.4: Management system;*
- *No.5: Farm woodland;*
- *No.14: Use of Welsh wood;*
- *No.15: Value of forestry sector;* and
- *No.16: Demand for wood.*

Activity required:	Direction, leadership and resource from WG and NRW to ensure a collaborative partnership approach to provide effective and proportionate regulation, facilitate trials for analysis and encourage landowners who want to plant woodland; promoting the woodland opportunities map as a guide to land owners and managers, including farmers, of those areas most suited to new woodland creation; WG and NRW role and purpose review of the WGWE; grant funding for woodland creation and management via successful implementation of Glastir.
Progress:	*To be reported annually.*

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[10] Cross refer to PA3.

Priority Action 5:	Deliver increased and safeguard existing tree cover in towns and cities and support sustainable urban tree management.
Lead and Partners:	WG; NRW; local authorities; Coed Cadw; Coed Cymru; FR; Llais y Goedwig; Local Health Boards; registered social landlords; Bat Conservation Trust; Archaeological Trusts
Evidence base:	A growing body of evidence illustrates that well maintained, attractive urban green infrastructure is crucial to increasing the amount of time people spend engaged in healthy outdoor activity. In addition, green infrastructure can contribute to community cohesion by helping to build pride in local communities and a sense of ownership by enabling volunteering activities for local people. Green infrastructure can take numerous forms: playing fields; nature reserves; community gardens, allotments and orchards[11]; and trees.

Trees in urban settings play an important role in providing a clean, attractive and resilient built environment be that in large cities and towns or small urban settlements. Evidence in favour of urban tree planting has shown the role of trees in reducing air pollution, regulating against urban flooding, reducing surface temperatures and providing valuable habitat for wildlife and pollinators which are essential for healthy functioning urban ecosystems[12]. As in rural areas, trees in urban settings are likely to become important tools in future efforts to adapt to a changing climate whilst also improving well-being and standards of living, for example as a means of addressing the prevalence of illnesses like asthma.

NRW has collected evidence in favour of the management of urban trees and increased tree cover in urban areas. NRW's study "*Tree Cover in Wales' Towns and Cities*" provides an analysis of the canopy cover in our towns and cities. Urban tree canopy cover in Wales was 16.8% in 2009 – mid range in terms of world rankings but lower than the 20% level of cover of the UKFS woodland definition.

Urban tree planting can deliver a range of ecosystem services and community benefits, as well as contributing to carbon capture and storage[13]. Recent i-Tree Eco studies in Wrexham, Bridgend and Swansea and the Tawe catchment have demonstrated the value of urban trees. Every year, trees in

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[11] Cross refer to PA6.

[12] See the "Action Plan for Pollinators in Wales" (http://gov.wales/topics/environmentcountryside/consmanagement/conservationbiodiversity/action-plan-for-pollinators/?lang=en)

[13] Cross refer to PA3.

those areas deliver £3.9million of benefits by: removing 258 tonnes of pollution; intercepting 654 million litres of rainfall; and capturing 6,409 tonnes of carbon from the atmosphere. In addition, the tree population stores 222,000 tonnes of carbon.

Building on this, and through working in partnership with planners, local authorities and other key partners, there is an opportunity to improve the environmental quality of the areas in Wales where most people live by adopting a strategic approach to managing urban trees and supporting sustainable urban tree management. Planting new trees as part of Sustainable Urban Drainage schemes has helped to realise multiple benefits. For example, the Stebonheath School, Llanelli SUDs scheme included an extensive element of new trees and associated planting. As well as offering intrinsic environmental benefits, the scheme offers the school children the opportunity to study trees in their immediate local environment. Other local planning authorities are producing supplementary planning guidance to help guide developers and the public in the multiple benefits that adopting a green infrastructure strategy can afford.

"*Woodlands for Wales*" *Indicators:*
- *No.6: Urban woodland and trees;*
- *No.9: Local benefits of woodlands to local communities;*
- *No.11: Recreation;* and
- *No.23: Heritage and landscape*.

Activity required:	Direction and leadership by lead bodies, including through NRWs "Good for People" theme[14]; working together to deliver the requirements of the Well-being of Future Generations (Wales) Act 2015 to utilise public land; education, particularly for young people, to raise awareness of the positive benefits of safeguarding and increasing urban tree cover; engaging with communities and voluntary groups to achieve support for sustainable urban tree cover; Coed Cadw promotional campaign to be launched 2015; Partner collaboration; sharing information, evidence and expertise.
Progress:	*To be reported annually.*

Priority Action 6:	*Explore the issues associated with enabling and building the capacity of community groups and enterprises to be involved in woodland management in order to help them use woodlands to realise well-being goals*.

[14] See NRW's Business Plan for 2015/2016 and Commitment P3.

Lead and _Partners:_	NRW; Llais y Goedwig; Coed Cadw; Federation of City Farms and Gardens; Community Land Advisory Service; The Green Valleys Community Interest Company; Groundwork Wales; Keep Wales Tidy; Community Voluntary Councils (such as Interlink RCT); Communities First clusters; Archaeological Trusts; WG
Evidence base:	The GVA and employment in the forest sector that is supported by woodland is noted in the evidence base for PA4. Woodland is also a valuable resource for communities capable of providing a range of potential benefits. Woodland can be used for training opportunities, enterprise ventures and recreational health and well-being initiatives. Through the "_Woodlands and You_"[15] process, NRW provides an opportunity for people and communities to come forward with proposals for activities, events or projects on or involving the WGWE.

There are significant issues to explore in terms of enabling community groups to be involved in woodland management. Community groups have different structures. They have diverse needs, expectations and skills often requiring different levels of support to ensure that their long-term involvement is sustainable. Their expectations may well be different, ranging from involvement in practical woodland management activity through volunteering opportunities to transfer of responsibility for woodland and its management. But community involvement may well be a means of increasing active management of areas of woodland that are currently undermanaged.

Woodlands also have the potential as a resource or asset for communities to help them to meet other objectives key to their on-going well-being. For example, growing locally sourced food has become increasingly popular in recent years. Community growing has links to issues such as food culture, health and well-being, food security and community cohesion[16]. Land availability is a significant limiting factor in promoting community growing. The extent to which community gardens, allotments and orchards can be accommodated on forest land (whether publicly or privately owned) can be evaluated to support the valuable benefits of community growing – there are examples of NRW managed land being used for community allotments in Blaencwm in the Rhondda Fawr valley, a Communities First |

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[15] NRW is developing a new scheme, "Mynediad", to enable access to land which it manages for a range of activities, projects and both social and commercial enterprises.
[16] See the food strategy for Wales, "Food for Wales, Food from Wales 2010-2020" (http://www.physicalactivityandnutritionwales.org.uk/Documents/740/Food%20Strategy%202010-2020-eng.pdf) and the "Community Grown Food Action Plan" (http://gov.wales/topics/environmentcountryside/foodanddrink/foodpolicyandstrategy/comgrownfoodactionplan1/?lang=en).

area.

WG and NRW have initiated a review of the role and purpose of the WGWE, which accounts for two-thirds of the conifer woodland in Wales and that review is relevant to the delivery of this Priority Action.

"*Woodlands for Wales*" *Indicators:*
- *No.10: Community involvement;* and
- *No.13: Local enterprises.*

Activity required:	Direction and leadership from lead bodies and Partners to support community groups overcome barriers to involvement in the management of woodland; WG and NRW role and purpose review of the WGWE; partnership collaboration to deliver the requirements of the Well-being of Future Generations (Wales) Act 2015 to deliver outcomes for the Action such as advocacy, promoting and supporting volunteering opportunities and community engagement; to contribute to achieving the well-being goals through the work of environmental bodies core funded by WG; Cynefin Programme; Community Land Advisory Service to signpost community groups to opportunities for community allotments and orchards on the WGWE; research to provide evidence; information sharing.
Progress:	*To be reported annually.*

Relationship to government priorities

Priority Actions 3, 4, 5 and 6 contribute towards:

- *Woodlands for Wales Outcomes: 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11;13;14; 15; 16; 18; 19; and 20.*

- *Well-being goals of: **a prosperous Wales**; **a resilient Wales**; **a healthier Wales**; **a more equal Wales**; **a Wales of cohesive communities**; and **a Wales of vibrant culture and thriving Welsh language**.*

PRIORITY ACTION AREA

Enhancing the management and production of Welsh timber and its economic benefits.

Overview

Woodlands and trees in Wales provide important economic benefits, not least as a source of sustainable material for construction. This is not only a benefit for growers and primary processors of timber, but also for the wider construction sector in terms of skilled future employment opportunities. Economic activity in Welsh woodlands has the potential to stimulate sustainable woodland management that will help to support a thriving forestry sector and deliver green growth, tackle poverty and provide a valuable recreational resource for the people of Wales.

Priority Action 7:	**Promote the uses and utilisation of Welsh timber, including as an essential material for sustainable construction central to the delivery of new housing.**
<u>Lead</u> and Partners:	<u>WG</u> (a cross-departmental working group comprising EST, Housing and Natural Resources); WFBP (and the Timber in Housing Group administered by WFPB); Coed Cymru; NRW; FR; Institute of Chartered Foresters.
Evidence base:	*Woodlands for Wales* recognises the vital role of Welsh timber in supporting the growth of Welsh forest industries, especially in rural areas. In turn, economic activity in Welsh woodlands can act as an impetus to long-term sustainable woodland management which not only supports the forestry sector but also delivers wider multiple benefits. "Grown in Britain" is an example of an initiative designed to promote the role British timber plays today and to encourage a greater understanding of the role of sustainable woodland management. But there are barriers to the use of Welsh home-grown timber. In terms of its use as a sustainable material for construction, the comparative weakness of the supply chain as compared with established, and competing, supply chains for other materials used in construction is a significant barrier to the use of timber in housing. Compliance with procurement requirements, particularly for public authorities engaged in the provision of social housing, is also a barrier. Locally sourced engineered timber components have the capacity to provide sustainable products and methods of construction. There is therefore a need for increased educational activity at further and higher education levels to raise awareness of and promote the technical capabilities of

domestic timber amongst students of architecture, civil and structural engineering, construction and so forth, thereby helping to stimulate demand for domestic wood and wood products. An example is promoting the use of timber as a material for building and construction. Promotion includes providing information on the properties of tree species and the quality of timber that they produce, as well as how to obtain them, in order to inform effective business decisions. In addition, there are wider benefits arising from the use of timber as a sustainable natural resource, including long term carbon sequestration from using timber as a building and construction material.

"*Woodlands for Wales*" *Indicators:*
- *No.13: Local enterprises;*
- *No.14: Use of Welsh wood;*
- *No.15: Value of forestry sector;* and
- *No.16: Demand for wood.*

Activity required:	Leadership by WG to facilitate collaboration by drawing stakeholders together to unlock barriers, encourage co-operation and identify opportunities as a means of contributing to the achievement of the well-being goals; funding from WG to support delivery by Partners.
Progress:	*To be reported annually.*

Priority Action 8:	***Develop models for woodland related enterprises and provide opportunities for employment, education and training across the forestry sector by developing sector relevant skills and providing work experience as pathways to employment.***
<u>*Lead*</u> and *Partners:*	<u>WG</u>; <u>NRW</u>; Coed Cymru; Llais y Goedwig; Coed Lleol; ConFor; UKFPA; WG; Institute of Chartered Foresters; Focus on Forestry First; Lantra; careers advisory services.
Evidence base:	Healthy and resilient woodlands and trees provide the foundation for the forestry sector. There are many examples of enterprises that are supported by woodlands, including producers, specialist forestry contractors and primary and secondary processors. But in order to thrive, the sector needs people with a wide range of skills: practical skills for growing, maintaining, harvesting and processing timber; management skills to achieve good

environmental stewardship; and agents and entrepreneurs with sound business skills. A buoyant forestry sector and well managed woodlands and forests will provide wider benefits and opportunities that require people with skills related to tourism, specialist recreation activities and community work.

At present there are skill shortages and gaps across most of the forestry sector and a lack of opportunities for new entrants to enter the market. Initiatives like apprenticeships could help by providing training opportunities running concurrently with employment and providing young people with skills that they can use elsewhere in the sector. In addition, there is a need for opportunities for professionals and managers in the forestry sector to develop skills to meet the future needs of the sector.

Volunteering opportunities in woodlands are another means to develop sector relevant skills. By working in partnership with local authorities and third sector organisations, there is opportunity to encourage more use of woodlands for education and training, as well as to meet well-being goals[17]. There is scope to encourage woodland-based small and emerging enterprises, including social enterprises, to access community support elements of the Rural Communities – Rural Development Plan and other services to support their business models.

"*Woodlands for Wales*" *Indicators:*
- *No.9: Local benefits of woodlands;*
- *No.10: Community involvement;*
- *No.13: Local enterprises; and*
- *No.17: Business health in the forestry sector.*

Activity required:	Leadership by WG and NRW, including through its "Good for People" and "Good for Business" themes[18], to facilitate collaboration by drawing partners together to encourage co-operation and identify opportunities; research to provide evidence and information – for example arising out of the FR research programme 2015-2019 – to inform the provision of vocational training and apprenticeships; social forestry courses under development by Coed Lleol and accredited by Agored/OCN; information for young people to raise awareness of the range of potential careers associated with forestry and woodlands.
Progress:	*To be reported annually.*

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[17] Cross refer to PA6.
[18] See NRW's Business Plan for 2015/2016 and Commitments P4 and B2.

Relationship to government priorities

Priority Actions 7 and 8 contribute towards:

- *Woodlands for Wales Outcomes: 1; 7; 8; 9; 11; 12; 13 and 15.*

- *Well-being goals of: **a prosperous Wales**; **a resilient Wales**; **a more equal Wales**; **a Wales of cohesive communities**; and **a globally responsible Wales**.*

PRIORITY ACTION AREA

Improving the condition of woodlands and trees

<u>*Overview*</u>

Wales is one of the least wooded countries in Europe, where woodland cover is 14% of the land area compared to the European average of 37%. Most woodland in Wales is either conifer plantation (the main source of home grown timber) or native woodland (although some has been converted to non-native plantation). The latter is mostly on a small scale and fragmented and whilst not all of it is ancient, a significant proportion has been continuously wooded for at least 400 years. Despite the fact that woodland cover is lower than the European average, forests, woodlands and trees have a significant landscape value.

Ancient woodlands and other species rich habitats have a vital role in providing ecosystem services. The quality of woodland habitats is determined by the condition of woodland soils, water, biodiversity, landscape and heritage. It is important to protect the structure and functioning of woodland habitat networks and where possible to reverse the fragmentation of woodland. Improving woodland networks provides the opportunity for wildlife populations to reach new habitats and to adapt to threats and changing circumstances, for example as a result of climate change. Improving the condition of woodlands is therefore key to healthy and resilient woodland ecosystems.

Ancient and veteran trees can be of high biodiversity value as species rich habitats for some increasingly rare lichens, mosses and fungi; and they can also be a cultural resource linking people and communities to place, environment and culture. Ancient, veteran and heritage trees are particularly important for the range of ecosystem services that they are able to provide. Such trees are a product of biological activity and past human activity and, like archaeological sites, are literally irreplaceable. It is not without foundation that they are often described as "green monuments".

All woodlands, whether coniferous or native, are exposed to risks from invasive non-native species (INNS) – organisms not native to Great Britain and with the potential to have negative effects on Wales's economy, environment and/or health. INNS are a substantial environmental and economic threat to Wales. Those that are already established represent a significant threat to native fauna and flora and currently cost approximately £125 million per year to tackle. But with growing globalisation in terms of increasing movement of people and in the context of the impact of climate change there are increasing threats from INNS in the coming years and decades.

Priority Action 9:	***Examine the adequacy of and scope to improve existing measures and procedures for the protection of valued trees, particularly ancient, veteran and heritage trees.***
<u>*Lead* and</u>	<u>WG</u>; Task and Finish Group drawn from the public, private and

Partners:	voluntary sectors (including Coed Cadw) supports the Welsh Government; Archaeological Trusts.
Evidence base:	The biodiversity, cultural and landscape value particularly of ancient, veteran and heritage trees is well documented. Mechanisms for the protection of trees are in place (principally via the Tree Preservation Order and Felling Licence regimes). Anecdotal evidence indicates that existing protections are insufficient in terms of the grounds on which protection can be conferred, particularly on ancient, veteran and heritage trees, and the care and maintenance requirements for particular trees that can be put in place. Woodlands for Wales Indicator 18 "Woodland Habitats and Ancient Trees" indicates that the percentage of both area and number of woodland features in Special Areas of Conservation which are in favourable condition has declined in the 2007-2012 reporting round compared to the 2002-2006 reporting round. "*Woodlands for Wales*" *Indicators* • *No.18: Woodland habitats and ancient trees;* and • *No.23: Heritage and landscape.*
Activity required:	WG supported by the Task and Finish Group; examine use of ancient tree inventory to inform State of Natural Resources Reporting.
Progress:	*To be reported annually.*

Priority Action 10[19]:	***Continue to bring identified special sites, Plantations on Ancient Woodland Sites ("PAWS"), native woodlands and priority habitats into favourable management on WGWE and encourage private landowners to do so.***
Lead and Partners:	NRW; Coed Cadw; WG; ConFor; Coed Cymru; Wildlife Trusts; Wales Biodiversity Partnership; Bat Conservation Trust; Archaeological Trusts
Evidence base:	There is a continued need for the gradual restoration of important woodland habitats through appropriate management, and where possible, expansion. Improving their health and resilience in our changing climate will help to ensure they continue to accommodate priority species, provide ecosystem

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[19] Cross refer to PA3 and 4.

benefits and remain a valuable resource in our landscapes.

In Wales, much of the ancient semi-natural woodland and other native woodland is not publically owned.. *Woodlands for Wales* recognises that much of this woodland is fragmented, isolated and that its ecological condition is vulnerable. The WGWE estate comprises around 19,000ha of the 95,000ha of Ancient Woodland Sites identified in the Wales Ancient Woodland Inventory (2011) administered by NRW. All PAWS sites on the WGWE have been assessed and prioritised and work is underway to restore a proportion of these PAWS to a more natural state and to improve their ecological condition. But more needs to be done to encourage more woodlands and trees of special conservation value to begin the journey towards favourable management. There is also concern that PAWS restoration will reduce timber production and PA4 focuses on addressing the shortfall in timber production in Wales.

A Woodland Strategy Advisory Panel Task and Finish group has been set up to review the adequacy of PAWS restoration policy on both the public and private woodland estate in delivering the outcomes of the *Woodlands for Wales* Strategy, and explore options on how this could be improved whilst protecting and enhancing these sites.

WG and NRW have initiated a review of the role and purpose of the WGWE, which accounts for two-thirds of the conifer woodland in Wales and that review is relevant to the delivery of this Priority Action. Economic incentives will facilitate the viability of PAWS restoration, potentially as a payment for ecosystem services. Information, advice and financial incentives to the private sector will be provided through funding mechanisms such as Glastir and the Nature Fund and through the work undertaken by Partners.

"*Woodlands for Wales*" Indicators:
- *No.7: Carbon balance;*
- *No.19: Woodland species; and*
- *No.20: Connectivity.*

Activity required:	WG and NRW review of the role and purpose of the WGWE; established programmes such as Environment Strategy for Wales Outcome 21 database of actions and reporting and planning under Article 17 of the EU Habitats Directive; guidance for woodland grant administrators/advisors; training for woodland owners, managers and other professionals; Task and Finish Group established to review PAWS restoration policy.
Progress:	*To be reported annually.*

Priority Action 11:	**Develop, promote and implement programmes to manage invasive non-native species which damage woodland habitats.**
Lead and Partners:	NRW; Welsh Government; FR; APHA; Wales Biodiversity Partnership; Non-native Species Forum; GB Non-native Species Secretariat; Wales Squirrel Forum; Deer Initiative Partnership in Wales; ConFor; WFBP; Vincent Wildlife Trust.
Evidence base:	Forests, woodlands and trees and the wider environment are exposed to the detrimental effects of a number of non-native species that are currently established in Wales and the UK, including rhododendron, Japanese knotweed, Himalayan balsam and grey squirrel. Damage caused by native and non-native deer is also increasing. Some of these species were intentionally introduced, and may have a cultural and historical legacy in some circumstances that needs to be considered.

There is also a risk that other non-native species with the potential to impact adversely on woodland habitats will establish themselves in the future[20].

Present and future risks from invasive non-native species are assessed against the Invasive Non-Native Species Framework Strategy for Great Britain, which provides the framework delivery of invasive non-native species policy in Great Britain.

A new European Regulation seeks to address the problems of invasive non-native species in a comprehensive manner so as to protect native biodiversity and ecosystem services across Europe, as well as mitigating the health and economic impact that those species can have. Member States will be required to compile lists of such species that are of concern to the European Union.

"Woodlands for Wales" Indicators:
- *No.3: Sustainable woodland management;*
- *No.8: Tree health;*
- *No.18: Woodland habitats and ancient trees;*
- *No.19: Woodland species; and*
- *No.20: Connectivity.* |
| *Activity required:* | Direction and leadership from WG and NRW, including through its "Good for the Environment" theme[21], in collaboration with the |

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[20] Cross refer to PA1.

	GB Non-native Species Secretariat; Partner support to develop and implement programmes; support for the Wales Wild Deer Management Strategy; WG and NRW to take forward a Grey Squirrel Management Action Plan for Wales; encourage citizen science; communication of the reasons for undertaking non native species management.
Progress:	*To be reported annually.*

Relationship to government priorities

Priority Actions 9, 10 and 11 contribute towards:

- *Woodlands for Wales Outcomes: 1; 2; 3; 4; 5; 6; 7; 8; 10; 16; 17; 18; 19; and 20.*

- *Well-being goals of: **a prosperous Wales**; **a resilient Wales**; **a healthier Wales**; **a Wales of vibrant culture and thriving Welsh language**; and **a globally responsible Wales**.*

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[21] See NRW's Business Plan for 2015/2016 and Commitment E2.

PRIORITY ACTION AREA

Non-timber value of forestry, woodlands and trees

Overview

Delivering the long-term ambition of Woodlands for Wales depends on Welsh forestry, woodlands and trees being actively and sustainably managed for timber production and to provide other goods and services. The Strategy is therefore predicated on the multiple benefits that forestry, woodlands and trees provide. In addition to the "timber value" to the forestry sector (growers and primary and secondary processors), forestry has a significant "non-timber value" beneficial to people, communities and the natural environment in Wales: -

- *non-timber forest products, produce and resources;*

- *employment in non-timber forest related activities;*

- *ecosystem services of forestry;*

- *recreation and access - a "green prescription" improving the health, well-being and fitness of people.*

Whilst there is data and information relating to "timber value", there is scope to explore the "non-timber value" of forestry in order to inform forestry policy and management.

Priority Action 12:	*Gather evidence to measure and evaluate the non-timber value of forestry, woodlands and trees in Wales.*
Lead and Partners:	WG; NRW; FC; FR; ConFor; Coed Lleol; Llais y Goedwig; Archaeological Trusts.
Evidence base:	The UK National Ecosystem Assessment was published in June 2011 and provides the first analysis of the UK's natural environment in terms of the benefits provided to society and to continuing economic prosperity. It recognises a range of ecosystem services provided by forestry and forms a basis for further understanding of the value of wider benefits provided by woodlands and trees. There are approximately 306,000 hectares of forests and woodlands in Wales. Although the idea of multi-purpose woodland management is widely accepted, the value of all of the benefits that woodlands and trees can provide for society is often overlooked: the economic, recreational, health, aesthetic and spiritual benefits for people living near or visiting

woodlands; biodiversity and landscape value; and heritage and cultural value. "Value" therefore encompasses social, health and cultural benefits as well as economic benefits and the potential for new markets related to woodland and timber. Whilst such value is recognised, it is difficult to properly evaluate. The i-Tree Eco studies[22] that have been undertaken to date are examples that demonstrate the value of the multiple benefits that woodlands and trees can provide.

Traditionally, the economic importance of forestry has focused on timber and timber based products. The economic value of non-timber forest products and the potential for developing sustainable economic activity in local communities has not been fully assessed. There are small businesses and individuals in Wales engaged in economic activity relating to non-timber forest products including wildflower honey production, berry collection and moss harvesting. The extent and value of the activity is not well understood and there is a need to fully assess its potential – for example under the umbrella of the European StarTree project – for development at the local community level.

Forestry and ecosystem services relating to forestry, woodlands and trees will be a central tenet to natural resource management and the planning and prioritising framework proposed by the Environment (Wales) Bill. Management of woodland aligned with health, economic and environmental benefits[23] which go beyond the value of timber itself, underpinned by a better understanding of the non-timber value of forestry, woodlands and trees, could potentially lead to new markets developing in the future.

As part of its research programme for 2015-2019, Forest Research will be undertaking research to value ecosystem services and to examine influences on behaviour and forest governance. The outputs from the research programme together with other research and information about non-timber value of forests woodlands and trees will inform future decision-making about woodland management.

"*Woodlands for Wales*" *Indicators:*
- *No.9: Local benefits of woodlands;*
- *No.10: Community involvement;*
- *No.11: Recreation;*
- *No.12: Accessibility;*
- *No.15: Value of forestry sector;* and
- *No.17: Business health in the forestry sector.*

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[22] Cross refer to PA 5.
[23] Cross refer to PAs 5 and 6.

Activity required:	WG and NRW role and purpose review of the WGWE; NRW "Good for Knowledge" theme[24]; FR research programme 2015-2019; European StarTree project reports; resources for additional studies and surveys; sharing information and evidence and promoting its practical use across public, private and third sector managed woodland; developing new markets as a result of recognising the broad "value" of woodlands and trees.
Progress:	*To be reported annually.*

Priority Action 13:	***Promote and enhance access to forestry and woodlands for more people to participate in and benefit from outdoor recreation experiences more often. Target resources in areas where the health, well-being and economic benefits will have the greatest impact.***
Lead and Partners:	NRW; Local Authorities; Visit Wales; Coed Lleol; Public Health Wales; Actif Woods; Llais y Goedwig; Coed Cadw; Ramblers Association; WATO; Community Development Foundation.
Evidence base:	Healthy and resilient woodlands and trees provide a wide range of community benefits, enabling people to use and enjoy woodlands, lead healthier lives and engage in economic activity related to woodland enterprises. Successful mountain bike trail centres will continue to attract visitors to Wales as well as providing recreational and economic opportunities for local communities. Similarly, a wider audience can also enjoy the access, recreation and economic benefits from experiencing other activities that woodlands can offer, including in and around urban settings.

Plant!, the Welsh Government's initiative, is a project to plant a tree for every child born or adopted in Wales. The objectives of the project are both woodland creation and health and well-being, encouraging recreational visits by families to areas of woodland.

Spending time and exercising outside can have a positive impact on health and well-being. The "Actif Woods Wales" project, run by Coed Lleol, operates at five sites in Wales and provides activities tailored to meet the needs of participants with chronic health conditions. Coed Lleol intends to expand the number of sites across Wales during this Action Plan. The |

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[24] See NRW's Business Plan for 2015/2016 and Commitment K3.

"Come Outside" programme engages with communities to encourage use of green space, including woodlands, to deliver health and well-being benefits. They both support the development of a base of evidence surrounding the health and well-being opportunities available in woodlands.

Communities can be supported to identify the benefits that woodlands and trees can provide to them, particularly through good quality local access and recreation opportunities.

Woodlands will play an increasing role in supporting the Welsh Government's efforts to improve opportunities for people and communities to access the outdoors for recreation. Woodlands are a good means of ensuring that there is easy and affordable access to quality local green space and outdoor recreation activities close to where people live, helping to improve community cohesion and tackle poverty. This is one of the key principles proposed in the Welsh Government's 2015 Green Paper on outdoor recreation in Wales[25].

"*Woodlands for Wales*" *Indicators:*
- *No.9: Local benefits of woodlands;*
- *No.10: Community involvement;*
- *No.11: Recreation;* and
- *No.12: Accessibility.*

Activity required:	WG and NRW[26] support for initiatives to improve access and recreation opportunities, building on the outcomes of the 2015 Green Paper; support from Partners who can provide, enhance or encourage and promote recreation opportunities in woodlands; encouraging participation by communities and groups that are less likely to visit and use woodlands; promoting opportunities for communities and the private sector to manage recreational sites and facilities; Cynefin Programme; WG, NRW and Partner resources for additional studies and surveys about public use of woodland.
Progress:	*To be reported annually.*

Relationship to government priorities

Priority Actions 12 and 13 contribute towards:

- *Woodlands for Wales Outcomes: 3; 6; 8; 9; 10; and 11.*

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[25] "Improving Opportunities to Access the Outdoors for Responsible Recreation" (http://gov.wales/docs/desh/consultation/150710-access-outdoor-recreation-consultation-en.pdf).
[26] See NRW's Business Plan for 2015/2016 and the four commitments set out in the "Good for People" theme.

- *Well-being goals of: **a prosperous Wales**; **a resilient Wales**; **a healthier Wales**; **a more equal Wales**; **a Wales of cohesive communities**; and **a Wales of vibrant culture and thriving Welsh language**.*

PRIORITY ACTION AREA

UK cross-border working

Overview

The landscape for the delivery of forestry services has changed in recent years and in April 2013, the functions of the Forestry Commissioners in relation to Wales transferred to NRW. Certain forestry functions, for example relating to tree health, remain of critical importance across GB. DEFRA, the Scottish Government, the Welsh Government and the Forestry Commission are participating in the Forestry Governance Project to look at the delivery of scientific capabilities and, particularly, long-term arrangements for the delivery of forestry research functions on a pan-GB basis.

Priority Action 14:	***Participate in the Forestry Governance Project to shape the future delivery of GB cross-border forestry functions ensuring that the needs of Wales, and of the other GB administrations, are accommodated****.*
Lead and Partners:	DEFRA; Scottish Government; WG; Forestry Commission; Forest Research; NRW; ConFor.
Evidence base:	The Forestry Commissioners' functions in relation to Wales have transferred to NRW and the management of forestry in other parts of GB is subject to review and probable change. As NRW builds its capacity to deliver the wide range of environmental services in Wales, it receives some technical, administrative and professional support from the Forestry Commission under a shared services agreement.
	The Forestry Governance Project provides a means to define pan-GB policy and operational requirements of forestry research functions and to assess the critical science capabilities needed to deliver those functions.
	In addition to science capabilities, there are other issues requiring consensus across territories, for example the maintenance of the UK Forestry Standard and Guidelines. The Standard defines the UKs approach to sustainable forest management and is the means by which a range of legal, quasi-legal and policy obligations are met to deliver a balance between the economic, environmental and social benefits that forestry can provide.
	"*Woodlands for Wales*" *Indicators:*

	- *No.1: Woodlands and trees;* - *No.3: Sustainable woodland management;* and - *No.8: Tree health.*
Activity required:	WG, DEFRA, Scottish Government and Forestry Commission to engage to ensure their respective needs are considered by this process.
Progress:	*To be reported annually.*

Relationship to government priorities

Priority Action 14 contributes towards:

- *Woodlands for Wales Outcomes: 2; 3; 5; 6; 13; 14; 16; and 18.*

- *Well-being goals of: **a prosperous Wales**; **a healthier Wales**; and **a more equal Wales**.*
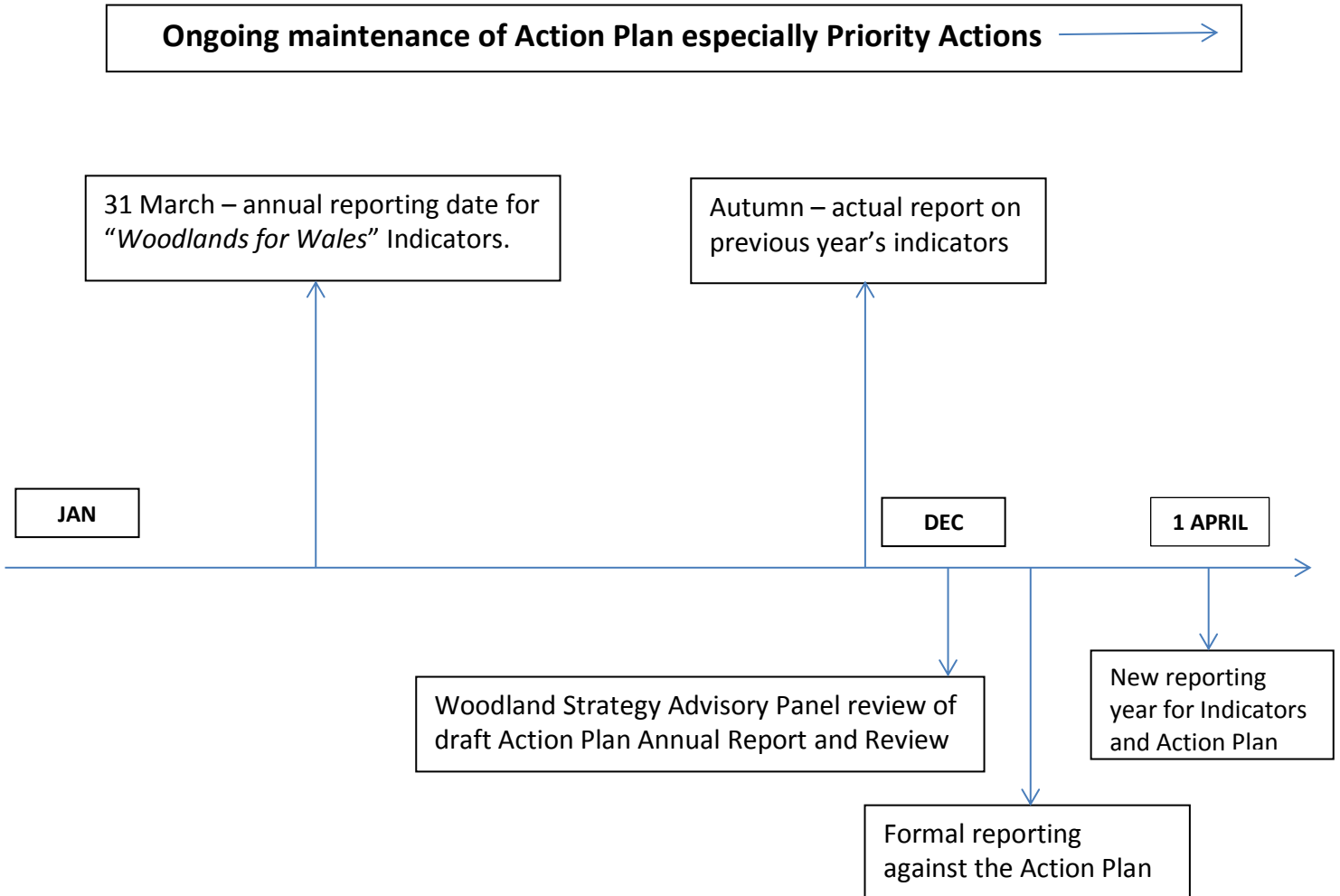
PART 3

Reporting and Review

22. "*Woodlands for Wales*" sets out the long-term ambitions for woodlands and trees in Wales and the outcomes required from them to benefit the economy, environment and people of Wales. "*Woodlands for Wales*" is a fifty-year strategy, recognising the long-term nature of managing forests, woodlands and trees and the multiple benefits that they can provide. This *Action Plan* sets out the short-term actions and activities to provide a focus on the long-term ambitions. It is one of a series of five-year action plans and many of the individual actions will contribute to the delivery of more than one of the Strategy's Outcomes. For this reason, "*Woodlands for Wales*" includes a suite of indicators which will give us confidence to assess progress across the whole breadth of "*Woodlands for Wales*".

23. The reporting and review cycle comprises of three elements: -

    (i)   "*Woodlands for Wales*" sets out the long-term *Vision* and *Outcomes* that we seek to deliver over the life of the strategy;

    (ii)   this *Action Plan*, and subsequent iterations, captures the actions and activities of delivery partners across all sectors of society that are required to implement the strategy; and

    (iii)   the "*Woodlands for Wales*" *Indicators* assess the impact of all of the actions and activities undertaken and monitor the success of all of our efforts to deliver the long-term *Vision* and *Outcomes*.

24. "*Woodlands for Wales*" *Indicators* are published each autumn for the past year ending 31 March[27]. Progress against the **priority actions** in the *Action Plan* will be up-dated on an ad hoc basis. In each calendar year, the Welsh Government will prepare and publish an annual report of overall progress against the **priority actions** set out in this *Plan*. Each annual report will be an opportunity to review and to update actions in response to the "*Woodlands for Wales*" performance indicators and other evidence from the past year. The diagram below illustrates how the reporting and review cycle will operate.

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[27] The Indicators can be accessed at: http://gov.wales/statistics-and-research/woodlands-wales-indicators/?lang=en

Action Plan – Annual Reporting and Review Cycle

Ongoing maintenance of Action Plan especially Priority Actions →

31 March – annual reporting date for "*Woodlands for Wales*" Indicators.

Autumn – actual report on previous year's indicators

JAN

DEC

1 APRIL

Woodland Strategy Advisory Panel review of draft Action Plan Annual Report and Review

New reporting year for Indicators and Action Plan

Formal reporting against the Action Plan

"Woodland for Wales" Vision, Themes and Outcomes

Our Vision:

"Wales will be known for its high-quality woodlands that enhance the landscape, are appropriate to local conditions and have a diverse mixture of species and habitats."

Themes **and Outcomes:**

Welsh Woodlands & Trees

1. More woodlands and trees are managed sustainably
2. Woodland ecosystems are healthy and resilient
3. Woodlands are better adapted to deliver a full range of benefits
4. Woodland cover in Wales increases
5. The management of woodland and trees is more closely related to other land uses
6. Urban woodlands and trees deliver a full range of benefits

Responding to Climate Change

7. Welsh woodlands contribute to reducing the carbon footprint of Wales   Many of the outcomes in the other sections also relate to climate change, which can be thought of as cross cutting

Woodlands for People

8. More communities benefit from woodlands and trees
9. More people enjoy the life long learning benefits of woodlands and their products
10. More people live healthier lives as a result of their use and enjoyment of woodlands
11. More people benefit from woodland related enterprises

A Competitive & Integrated Forest Sector

12. More welsh-grown timber is used in Wales
13. The forest sector is better integrated and more competitive, supporting the welsh economy
14. Increased use of timber as a key renewable resource
15. A thriving, skilled workforce in the forestry sector

Environmental Quality
16. Woodland management achieves high standards of environmental stewardship
17. Woodlands and trees of special conservation value are in favourable management
18. Woodland biodiversity is supported & native Woodland is in favourable management
19. Woodlands and trees make a positive contribution to the special landscape character of Wales and to sites of heritage and cultural importance
20. New and existing woodlands and trees contribute to water and soil management

Well-being Goals

A prosperous Wales *An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.*

A resilient Wales *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).*

A healthier Wales *A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.*

A more equal Wales *A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio economic background and circumstances).*

A Wales of cohesive communities *Attractive, viable, safe and well-connected communities.*

A Wales of vibrant culture and thriving Welsh language *A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts and sports and recreation.*

A globally responsible Wales *A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.*

Glossary

Ancient woodland/trees: sites that have been continuously wooded since before 1600AD. Ancient trees are old or aged in comparison with trees of the same species.

Biodiversity: the variety of ecosystems and species, including genetic variation within species.

Carbon sequestration: the flow of carbon into terrestrial or marine reservoirs, including direct removal of carbon dioxide from the atmosphere through, inter alia, land-use change, afforestation, reforestation and forestry practices that enhance soil carbon.

Climate change: natural and human induced changes in the "average weather" of a region.

Community: people holding something in common: place; or common interest.

Continuous cover forestry: silvicultural systems whereby the forest canopy is maintained without clear felling.

Ecosystem: the interaction of plants and animals with each other and the non-living environment.

Ecosystem services: the benefits from the natural resources and processes supplied by natural ecosystems, distinct from ecosystem products and functions because there is

FCGB/FC/FR: Forestry Commission Great Britain, Forestry Commission and or Forest Research.

Gross Value Added: method of assessing the economy and the proportion which different industries contribute towards it.

Low impact silvicultural systems: silvicultural systems which are alternatives to clear felling and minimise the environmental impacts.

Native species: one that arrived in Wales without the assistance of humans during post-glacial colonisation. *Native woodland* is woodland mainly or entirely composed of locally native species.

Natural resources: resources provided by ecosystems including: animals, plants and other organisms; air, water and soil; minerals; geological features and processes; physiographical features; and climatic features and processes.

NRW: Natural Resources Body for Wales.

PA: Priority Action.

PAWS: Ancient Woodland or semi-Ancient Woodland sites that have been more or less replanted and the ecological value of the site has been degraded.

Plantation: woodland where the current trees have been planted. Often includes naturally regenerating tree as well. Includes former semi-natural woodlands

human demand for the natural resources.

Priority open habitats: habitats identified as threatened and subject to a UK Biodiversity Action Plan, including: upland heathland; blanket bog; and lowland meadows.

Productive potential: the volume of timber that could potentially be harvested sustainably from a woodland area, determined by factors such as growth rate of the trees, the practicality of harvesting the timber and issues such as biodiversity, conservation and recreation.

Semi-natural woodland: in the UK, no truly "natural" woodland remains. Semi-natural woodlands have current stands predominantly composed of trees and shrubs native to the site and not obviously planted. They have arisen mainly from natural regeneration or form coppice/pollard growth from naturally regenerated individuals.

Short rotation forestry: cultivation of fast growing trees for 8-20 years, often for coppice where harvesting may take place every three years or so.

Silviculture: the techniques of tending and regenerating woodlands, and harvesting their physical products.

Special sites: Internationally protected sites (including: Natura 2000 sites protected under the EC Habitats and Birds Directives; and sites protected under the RAMSAR Convention) and nationally protected sites (including: National Nature Reserves; and Sites of Special Scientific Interest).

UKFS: UK Forestry Standard is the approach to sustainable forestry adopted by the government of the UK's constituent territories. Establishes the standard for the sustainable management of all forests and woodlands in the UK.

restocked by planting.

UKWAS: UK Woodland Assurance Standard is an independent certification standard for verifying sustainable woodland management in the UK.

Veteran tree: a tree that shows signs of ancientness, irrespective of age. Like ancient trees, they are trees of biological, aesthetic or cultural interest.

Well-being goals: the goals set out in section 4 to the Well-being of Future Generations (Wales) Act 2015.

Welsh National Forest: all woodlands in Wales, in both public and private ownership.

WFPB: Wales Forest Business Partnership.

WG: Welsh Government.

WGWE: Welsh Government Woodland Estate. The land owned by the Welsh Ministers and placed at the disposal of NRW under the Forestry Act 1967.