

Wildfire Wise Wales Doeth am Dân Cymru

A Community Based Approach

February 2024



Llethrau Llon
Healthy Hillsides

Wildfire Wise Wales Doeth am Dân Cymru - A Community Based Approach

Phased Sign-off			
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Executive Summary

The Healthy Hillides project is a collaborative approach to wildfire management, supported by the European Agricultural Fund for Rural Development through Welsh Government. Steered by four core partners; Natural Resources Wales; South Wales Fire & Rescue Service; Wildlife Trust for South & West Wales; and Rhondda Cynon Taf County Borough Council, the initiative champions a collaborative working for integrated wildfire management on a Landscape scale.

Working with key organisations, stakeholders, and communities, the Healthy Hillides project focuses on creating a proactive year-round solution to a seasonal wildfire problem through evidence building and demonstration trials within the South Wales Valleys. We have taken a co-productive approach to exploring the issues and making recommendations.

Healthy Hillides explores wildfire as an environmental, socio-economic, cultural, and incident response challenge. The project has looked at the many and varied environmental and social connections to wildfire. It is recognised that no one action can tackle the challenge of wildfire, to eradicate, minimise or reduce impact. A suite of actions across society are needed to ensure a resilient landscape, resilient communities, and resilient public services.

Prevention: To adapt and change behaviours which will create a wildfire wise culture across communities, public services, and land managers. This will act to reduce the behaviours which increase risks and build resilience to wildfire.

Response: Actions to reduce risk, tackle ignitions, fuels, and ways in which we manage the landscape, our interaction with the environment and tactical response to wildfire.

Education: Increase understanding of the wildfire cycle, how actions can reduce or increase risk. Raise awareness of the environmental and social connections to wildfire and the Welsh landscape. Build capabilities to adapt and to act preventatively to reduce wildfire, to build resilience in the environment and social, wellbeing and economic resilience in communities.

This report captures the learning from the Healthy Hillides demonstration project, particularly the community and wider engagement. This report takes the learning and makes a series of recommendations to build wildfire resilience within communities, through action and awareness on the ground and the need for a more integrated strategic approach in policy. This report looks at how a community can adapt and change behaviours to mitigate the risks of wildfire, particularly on the urban – rural interface.

Wildfire Wise Wales Doeth am Dân Cymru: Dull Cymunedol

Crynodeb Gweithredol

Mae prosiect Llethrau Llon yn ddull cydweithredol o reoli tanau gwyllt, wedi'i gefnogi gan Gronfa Amaethyddol Ewrop ar gyfer Datblygu Gwledig trwy Lywodraeth Cymru. Wedi'i lywyo gan bedwar partner craidd, sef Cyfoeth Naturiol Cymru, Gwasanaeth Tân ac Achub De Cymru, Ymddiriedolaeth Natur De a Gorllewin Cymru, a Chyngor Bwrdeistref Sirol Rhondda Cynon Taf, mae'r fenter yn hyrwyddo cydweithio ar gyfer rheoli tanau gwyllt mewn ffordd integredig ar raddfa'r dirwedd.

Gan weithio gyda sefydliadau, rhanddeiliaid, a chymunedau allweddol, mae prosiect Llethrau Llon yn canolbwyntio ar lunio datrysiad rhagweithiol gydol y flwyddyn i broblem dymhorol tanau gwyllt trwy ddatblygu tystiolaeth a threialon arddangos yng Nghymoedd De Cymru. Rydym wedi mabwysiadu dull cydgynhyrchiol o archwilio'r materion a gwneud argymhellion.

Mae Llethrau Llon yn archwilio tanau gwyllt fel her amgylcheddol, economaidd-gymdeithasol, diwylliannol ac o ran ymateb i ddigwyddiadau. Mae'r prosiect wedi edrych ar y cysylltiadau amgylcheddol a chymdeithasol niferus ac amrywiol â thanau gwyllt. Cydnabyddir na all un cam gweithredu fynd i'r afael â her tanau gwyllt, i'w hatal neu i leihau eu heffaith. Mae angen cyfres o gamau gweithredu ar draws cymdeithas i sicrhau tirwedd wydn, cymunedau gwydn a gwasanaethau cyhoeddus gwydn.

Atal: Addasu a newid ymddygiad a fydd yn creu diwylliant doeth am danau gwyllt ar draws cymunedau, gwasanaethau cyhoeddus a rheolwyr tir. Bydd hyn yn lleihau'r ymddygiadau sy'n cynyddu'r risgiau ac yn meithrin gwytnwch rhag tanau gwyllt.

Ymateb: Camau i leihau'r risg, mynd i'r afael â thaniadau, tanwydd a ffyrdd yr ydym yn rheoli'r dirwedd, ein hymwneud â'r amgylchedd ac ymateb yn dactegol i danau gwyllt.

Addysg: Cynyddu dealltwriaeth o'r cylch tanau gwyllt, sut y gall gweithredoedd leihau neu gynyddu'r risg. Codi ymwybyddiaeth o'r cysylltiadau amgylcheddol a chymdeithasol â thanau gwyllt a thirwedd Cymru. Meithrin galluedd i addasu ac i weithredu'n ataliol i leihau tanau gwyllt, i feithrin gwytnwch yn yr amgylchedd a gwydnwch mewn cymunedau o ran lles, cymdeithas a'r economi.

Mae'r adroddiad hwn yn casglu'r hyn a ddysgwyd o brosiect arddangos Llethrau Llon, yn enwedig y gymuned ac ymgysylltu ehangach. Mae'r adroddiad hwn yn cymryd yr hyn a ddysgwyd ac yn gwneud cyfres o argymhellion i feithrin gwytnwch rhag tanau gwyllt o fewn cymunedau, trwy weithredu ac ymwybyddiaeth ar lawr gwlad a'r angen am ymagwedd strategol fwy integredig mewn polisi. Mae'r adroddiad hwn yn edrych ar sut y gall cymuned addasu a newid ymddygiadau i liniaru risgiau tanau gwyllt, yn enwedig ar y rhyngwyneb trefol – gwledig.

Wildfire Wise Wales Doeth am Dân Cymru: A Community Based Approach

1. Introduction: The Healthy Hillides Wildfire Demonstration and Evidence Project.

The Healthy Hillides project looks at how we can collaboratively and sustainably tackle the challenge of wildfire. Wildfire is a complex problem, with root causes within society, the landscape and policy. The Healthy Hillides Project was borne out of the significant number of wildfires in the South Wales Valleys as part of our work in developing ways of working and a place-based approach as part of the Well-being and Future Generations Act and the Environment Wales Act. This project sought to explore what does an integrated approach to an environmental, socio-economic problem look like, working collaboratively in the spirit of the Environment Wales Act and Well-being and Future Generations Act.

Through extensive discussion across a variety of stakeholders representing different sectors, communities, and perspectives we have learned that an integrated approach is essential, no one solution can resolve this problem. An integrated wildfire management is the approach to take. This is echoed internationally having learned from many years of focused action not resolving the problem of wildfire.

This report provides an overview of the social aspects of wildfire, particularly how to work with communities and communicate with the public and decision makers within the rural-urban interface, where people's actions can exacerbate the risk and impact of wildfire. This report looks at how a community can adapt and change behaviours to mitigate the risks of wildfire, particularly on the urban – rural interface.

This report has informed the Wildfire Wise Wales Community Risk Assessment guide and the Wildfire in Wales Prevention Strategy. This report is aimed at informing communities, community leaders, community practitioners and decision makers. To inform strategic planning and approach in wildfire high risk areas and as part of a local or regional risk assessment, this report should be read alongside the Wildfire in Wales Prevention Strategy. To build community resilience and inform local risk management within communities and to support communities, this report should be read alongside the Wildfire Community Risk Assessment Guide.

2. Recommendations

In presenting the findings of the project, a series of recommendations have been made. Here we cover how a community can adapt and change behaviours to mitigate the risks of wildfire, particularly on the urban – rural interface.

- Recommendation 1: Inclusion of Wildfire community resilience in climate adaptation plans, policy, and strategy at all levels by Welsh Government, Local Authorities and

Public Service Bodies, with adequate resourcing to ensure the latest evidence and best practice on wildfire mitigation for community resilience is being included in climate adaptation planning.

- Recommendation 2: Wildfire resilience is incorporated into strategic local and regional planning. Specific mitigation measures for local planning decisions should be required for public safety. Appropriate planning guidance should be developed to guide planning authorities and developers in building wildfire resilience into future development in wildfire hotspots.
- Recommendation 3: Community service provisions should build in wildfire awareness in wildfire hotspots, risk assessments within communities can highlight key mitigation measures to reduce risks.
- Recommendation 4: Design a training and awareness programme for key community stakeholders; housing associations in high-risk areas, developers, schools, third sector organisations. To ensure long-term sustainability and resilient working relationships.
- Recommendation 5: A long term funded and resourced central programme to be rolled out to prioritised communities throughout Wales. Based on the train the trainer and peer to peer mentoring to embed training, awareness, and knowledge within communities by trusted and familiar community leaders.
- Recommendation 6: Share the findings of the Healthy Hillsides Project as guidance to support local communities to understand and undertake risk assessments and mitigation on the ground to reduce community risk and build resilience.
- Recommendation 7: Any programme building community wildfire resilience should build a programme around incentives and tangible community benefits and opportunities.
- Recommendation 8: Undertake a behavioural insights appraisal within the community to better understand the challenge.
- Recommendation 9: In high-risk areas and for best practice, all Fire and Rescue Services (FRS) to include external property check lists to home safety visits, this would be added to the already in place internal checks for risk reduction include garden and exterior home advice.
- Recommendation 10: Provide a guide to stakeholders on how to embed and incorporate wildfire resilience through projects delivering public good.
- Recommendation 11: Ensure outdoor recreation providers are identified as stakeholders and that engagement opportunities through outdoor providers are built into community engagement, particularly where there is a landscape, youth, health, or environmental benefit.

- Recommendation 12: Through the Wales Wildfire Wales Charter consistent and accessible messaging to the public, and communities is required with simple mitigation measures which can be echoed locally by local authorities, community leaders and support agencies.

3. Background: The South Wales Urban – Rural Interface

South Wales has one of the highest numbers of wildfire incidents within the UK. Since 2010 there have been over 75000 wildfire incidents in South Wales. In South Wales this is primarily an antisocial behaviour problem, with wildfire being started deliberately. In addition to the deliberate fires, the increased fuel and lack of both land and risk management has increased the scale of the challenge.

The South Wales Valleys landscape has a distinct and challenging urban interface, with some of the most populous and urban areas being immediately adjacent to the ffridd hillsides, a landscape dominated by vegetation which are highly susceptible and adapted to fire. The landscapes are important as part of the Valleys heritage and are important ecological networks connecting habitats and species throughout the valleys¹.

The communities are also some of the most deprived areas of Wales, with high levels of health and economic deprivation and high levels of antisocial behaviour.

This close interaction of communities and high fuel loads, also known as Rural-Urban Interface (RUI) increases the risk for wildfire and risk to people and property. This in turn is putting greater pressure on the available resources to manage the fire risk.



Photo: Wildfire May 2023 from Porth to Trebanog, RCT. Photo credit Craig Hope.

Under climate change predictions wildfire amongst other environmental hazards are set to become more prevalent, this will have significant direct and indirect impacts on landscape character.

¹ South Wales Central Valleys Ecological Resilience Assessment (NRW 2022).

Nationally it is recognised that the impacts of climate change will increase the risk of wildfire, highlighting agriculture, forestry production and biodiversity being at increased risk from wildfire.² Wales is the first country in the world to declare a 'Climate Emergency,' setting out priorities to mitigate climate change. Importantly in addition to reducing our contribution to Climate Change, we need to adapt and mitigate the impacts of climate change. The Welsh Government Prosperity for All: A Climate Conscious Wales - Progress Report 2022³ highlights what Wales is doing to tackle wildfire and what further progress needs to be made. The Healthy Hillides Project is highlighted as a case study on mitigating the impacts of wildfire.

It is known that disadvantaged groups suffer disproportionately from the adverse effects of climate change, resulting in greater subsequent inequality. Deprived communities have an increased exposure to the adverse effects of climate. They are more susceptible to damage caused by climate change and are less likely to cope and recover from the damage suffered⁴. We see this in the South Wales Valleys and rural communities, where the occurrence of wildfire is most frequent.

4. A Wildfire Strategic View

An objective of the Healthy Hillides project was to deliver a targeted community initiative designed to work with communities to reduce individual and localised wildfire risk, through awareness, education and engagement. The [Firewise USA](#) model and [Firewise UK](#) being trialled in Dorset, requires a dedicated resource to work with communities to encourage and embed an awareness and ownership of the risks from wildfire and their personal risk to wildfire within the urban interface. The Healthy Hillides project has explored applying the Firewise model in Wales, to empower communities to take responsibility and work together to reduce their risk from wildfire.

Through engagement and exploring the challenge it was clear that supporting communities, particularly those within the most at-risk areas was an important objective. However, this is an additional resource requirement to public services, which are already at capacity and greatly under-resourced. Ways to explore embedding additional messages into existing opportunities, working across different agencies, and increasing general awareness is a more likely and achievable outcome under current circumstances.

Due to the landscape wildfire risks and social challenges in addition to a future adapting to climate change, a need for a more integrated consideration of both environmental and community resilience is required, to reduce wildfire risk. This needs to become embedded in the community culture, for people living and working in key higher risk areas.

Within the Healthy Hillides project area, a greater need has also been identified for public services and public assets to be better aware, with preventative and proactive measures undertaken, rather than reactive management. This is for the most part representative for other areas in Wales.

² [Climate Change Committee \(2021\). Independent Assessment of UK Climate Risk. Available at \[www.ukclimaterisk.org\]\(http://www.ukclimaterisk.org\)](#)

³ [Prosperity for All: A Climate Conscious Wales - Progress Report October 2022 \(gov.wales\)](#)

⁴ Climate Change and Social Inequality. S. Nazrul Islam & John Winkel. UN Department of Economic & Social Affairs [wp152_2017.pdf \(un.org\)](#)

The Healthy Hillides project has also identified the need for land managers and owners across a spectrum of land use to have a greater understanding and awareness of wildfire risk and incorporate wildfire risk management into the year-round management of the land. Training and practical actions are required to adapt to the existing and increasing wildfire risk.

There is also an identified need for people using the natural environment for access and recreation to be more aware and educated on wildfire risks, increasing ownership and responsibility within the natural environment. This extends to education and safe use of fire messaging through traditional and social medias.

This project will explore opportunities and make a series of recommendations. Through the Healthy Hillides Project, we trialled different mechanisms, created engagement materials and created a framework and template for others to use to build a Wildfire Wise culture across South Wales and wider.

5. Global Perspective of Community Engagement

There are many different models across the world looking at community awareness and resilience to wildfire. It is seen globally that as a key aspect of any integrated approach to wildfire management community education, prevention activities and response it is essential to reduce community and personal risk and support wildfire incident response. Adapting behaviours will reduce the risk within communities, this is needed to reduce likelihood of ignition, but also the severity of fire and the proximity and security of homes and lives.

It is recognised globally that for the management and risk reduction of wildfire in the landscape there needs to be an integrated approach and a commitment by different stakeholders to affect the risk within their sphere of influence. For communities this is the land surrounding their properties.

Whilst it is essential that individual homeowners or tenants need to adapt their behaviours and undertake action to reduce the risks to themselves, it is recognised that there is a need to support communities through regulation, policy making, and resources to support and guide communities.

In the US, and other wildfire prone countries this is supported through legislation⁵ requiring residents and public services to actively protect and reduce fire risk through actions around the home for a defendable space. There is similar legislation in many countries in Europe requiring residents and landowners to undertake action to reduce their risk from wildfire. We have found that without a legislative driver or a strong local or national government steer it has been very difficult to work with communities to develop or implement a programme with any consistency or effectiveness.

⁵ [US Wildfire Legislation: https://www.doi.gov/wildlandfire/policy](https://www.doi.gov/wildlandfire/policy)

5.1 Integrated Management System for Rural Fires Directive - Portugal

Following the devastating wildfire in 2017, where a total of 117 people died, Portugal implemented a National Plan and built it into existing and new legislation to deliver an Integrated Management System for Rural Fires⁶ (SGIFR). It provides a national plan, policies, and strategic guidelines to reduce the danger and change the behaviour of the owners, users and the direct and indirect beneficiaries of the rural environment.

Planning in the rural environment must be guided by fuel management and risk to wildfire, building in requirement for communities to undertake self-protection of people and infrastructure. The legislation recognizing that the adoption of good practices in landscape planning and management, namely the implementation and maintenance of management strips of fuel, the disposal of waste materials and more sustainable land management practices (agroforestry and livestock grazing).

The plan has identified high risk communities and provides guidance⁷ on fuel management around individual properties and communities. Monitoring and a pre fire season awareness raising phase is undertaken to prevent high risk behaviours and raise fuel management awareness to ensure the safety of priority communities. The Plan provides a top ten action list for individuals and communities, which includes vegetation and debris management on your own land and property prior to the spring fire season, checking neighbouring land, and evacuation plans.

This is a well-resourced, regulation and enforcement lead way to work with communities – this is appropriate to place given the extent and severity of the wildfire experienced in Portugal. Whilst Wales does not have the same level of risk there are lessons to be learned and applied in Wales.

5.2 Firewise USA

Firewise USA is a programme that promotes wildfire preparedness and risk reduction for communities in the United States. It is a voluntary programme encouraging homeowners, communities, and organisations to take proactive measures to reduce the risk of wildfire to their properties. Firewise USA was established by the National Fire Protection Association (NFPA) in partnership with different federal agencies. Its objective is to empower communities to collaboratively address the wildfire risk and create safer environments for communities and firefighters.

The Firewise USA model is based on community accreditation, undertaking specific tasks and actions to reduce fire risk. These actions include creating defensible space around homes by clearing vegetation and creating firebreaks, implementing building and landscaping practices that are more resistant to fire, promoting community-wide education

⁶ [Rural Fire Prevention and Protection | Safe Communities Portugal](#)

⁷ <https://www.portugalresident.com/land-cleaning-and-rural-fire-prevention/>

and outreach programs, and fostering collaboration with local fire departments and emergency management agencies.

Communities register and pay fees to gain access to resources, tools, and technical assistance from the Firewise programme and its partners. The programme emphasises the importance of community engagement, education, and ongoing maintenance to ensure long-term success in reducing wildfire hazards.

Again, Firewise USA is appropriate and reflective of the risk and the demographics of the USA, where in some states and counties wildfire risk is high, and there is generally a culture of self-reliance and personal responsibility. This was the original inspiration behind the community aspect of the Healthy HillSides Project.

5.3 Firewise Dorset

The Firewise UK Dorset group⁸ Firewise-UK encourages communities to work together to reduce their risk by taking practical steps in the area around the home and garden. Based upon and affiliated with the Firewise USA programme and the National Fire Protection Association. Firewise UK and the active groups in both Dorset and Surrey are the first Firewise communities in the UK.

The Firewise Dorset group was established after a significant wildfire incident on Dorset's Upton Heath. This incident resulted in the evacuation of residents from their homes. Fortunately, no homes were damaged, but this incident provided a community response and an opportunity to introduce Firewise principles to the community. The group was established by Dorset County Council and Dorset & Wiltshire Fire and Rescue Service. The Firewise Dorset group continues to be supported by the Dorset Council and FRS along with the Dorset Police & Crime Commissioner and the Urban Heaths Partnership.

The Firewise Dorset group represents the climate change future scenarios where there will be more wildfire and coming closer to communities. It recognises the need for communities living within the Rural Urban Interface (RUI) are at risk and this risk will increase if no mitigation is taken.

The two established Firewise groups in the UK are within communities which are distinctly different in demographic to the communities in the South Wales Valleys. Home ownership percentage, property prices and size vary between the established Firewise groups and South Wales. The support from the Dorset Heaths Partnership funded through 10 organisations to restore, enhance and protect the heathland site and work with the surrounding communities is a fantastic opportunity to build Firewise communities into the project.

⁸ <https://www.dorsetheaths.org.uk/firewise/>

5.4 Landworks - A Firewise Model for South Africa

In 2006, South Africa adopted a Firewise program based upon the Firewise USA model but tailoring the concept appropriately for the demographic in South African communities.

Landworks⁹ has developed three different models, all appropriate to the community, socio economic and landscape. These range from basic voluntary community project to a scalable, modular, government funded Community programmes, which offer part-time employment in rural areas – this is an important aspect given poor unemployment opportunities.

It recognises that in such communities it is difficult to engage and ensure long term viability of groups and one off or short-term support is not enough. To facilitate sustainable behaviour change and embed active participation, particularly in areas of high socio-economic deprivation, support is critical. The programme recognises the challenges and conflicts and advocate a co-productive approach where solutions are community lead.

Communities sign up and are trained in proactive community-based preventative fire management techniques, learning about defensible space around properties, fuel management and assessment of the land around them. Community members and local stakeholders work together to assess risk and plan co-productively to reduce the community's risk. They use train the trainer approaches to ensure long term sustainability of the community action for the long term. The emphasis of the programme is to be community led, building self-reliance within poor resourced communities. This is a model which is appropriate for the communities it works with, acknowledging the need for long term and embedded support and resources.

6. Healthy Hillides Communities Objective

From the development of the Healthy Hillides those who own a house in the country or in the forest are more vulnerable to fires because of the proximity of vegetation. Cleaning the vegetation around houses is the best way to prevent a fire from reaching you and your property.

The original objective of the project was to establish a series of community groups who through initial support and guidance would become independent of support and work as a community group to reduce the wildfire risk to their homes and communities. A key aspect of this project is to ensure that the groups and activity within key communities becomes sustainable and delivered under the ownership of the community.

We explored a number of different ways to achieve this objective, working with communities identified due to their higher risk to wildfire. As detailed in the Stakeholder section we trialled a variety of different approaches to achieve this objective. From our learning through the trials, we have adapted our objective to be more reflective of the communities we have worked in and for long term sustainability.

⁹ [Firewise | LANDWORKS NPC](#)

It was recognised that public services, organised recreational groups and decision makers are in a better position to undertake preventative action and build a culture of awareness and prevention for wildfire. Therefore, the adapted objective for wildfire community awareness is to provide the tools, guidance and understanding to community supporting services to build wildfire resilience into communities.

6.1 Stakeholder Analysis

In developing our community engagement programme, we undertook a stakeholder mapping exercise to identify key communities and community groups to work with. A key element of this has been identifying the different impacts of wildfire, and then how these impacts can affect different parts of the community. This has led to us identifying different pathways and types of engagement most appropriate to the risk and impact from wildfire.

- **Communities** – Homes, streets, families, businesses owners, community services who are within the RUI – buildings or assets which are immediately adjacent to areas of open habitat. Classically the ffridd or coed cae valley sides or open mosaic habitats in flatter landscapes.
- **Wider Public** – This is the wider community who may not live immediately adjacent, but do work within the landscape, recreational users, and wider community members. Embedding Wildfire Wise messaging into wider opportunities such as health messaging or Countryside code.
- **Public Services/Community support services** – Housing associations, Councils, Public Bodies and NGOs who own and manage land, manage community services, or are consulted and make decisions on and around the RUI. Key messages and information available through any engagement opportunities.

It is recognised that there are differing levels of action and mitigation required depending on the location and landscape people live in, work or use. The level of recommended intervention within each stakeholder also differs. We have developed a series of recommendations considering these different levels. There will be a need to identify different levels of action depending on the perceived risk of the place, asset or individual. There will be a series of recommendations which aim to empower different stakeholders to take action or support others to act to reduce wildfire risk.

In each instance there will be actions and behaviour changes which will recognise the wildfire risk and be able to apply the appropriate mitigation. There are also tools, recommendations and communications which can be embedded into all aspects of support services.

7. Trial Approaches and Stakeholder Engagement

Through the Healthy Hillides project, we have trialled a number of different initiatives to evidence and demonstrate the opportunities and challenges around community engagement. Given the greatest number of wildfire incidents is on the RUI, in mostly

deprived communities, this was an opportunity to explore engagement opportunities to inform future engagement recommendations.

7.1 Wilder Health Trial

In collaboration with a local outdoor fitness provider; Play It Again Sport, we trialled a series of outdoor exercise sessions. The aim of the sessions was to encourage local people to participate in outdoor land management activities which aimed at improving physical health and community action. Wider objectives of the project were to encourage more people to volunteer with the Healthy Hillsides project on future volunteer activities. By providing information about the local environment and pressures on the environment the project also sought to improve connection with the and local environment.

The purpose of working with Play It Again Sport was to engage different participants to conservation work by using physical activity as a motivator. This activity sought to engage those who wish to exercise outdoors and with a purpose, sharing a goal and greater community benefit. The activities were separated into two types: scrub clearance at Clydach Vale and firebreak creation at Penrhys Fawr. Both activities supported the wildfire mitigation actions identified for the communities.

Through community workshops we have also heard about a number of different local outdoor groups and associations, all with the objective of getting people outside, using the hillsides for responsible physical and mental wellbeing. The value of the landscape has been highlighted through many different stakeholders and discussions and is an important local resource. Working with local social enterprises and local businesses is an important opportunity which can be applied to wildfire awareness and mitigation, but also to other social and environmental challenges.



Photo: Wilder Fitness group Clydach Vale January 2022. *Photo credit Natasha Burnell*

The sessions were well attended with an average of 10 people per day. This is considered good for an outdoor winter session (targeted for the annual post new year fitness ambition). Sessions were attended by a diverse range of participants in terms of age, gender, and ability across multiple dates. Indicating a good marketing strategy reaching multiple demographics. The trial benefited from a collaborative approach. With both partners benefitting. The local outdoor provider benefitted from a greater circulation and endorsement from National environmental bodies. Whilst the Healthy Hillides project gained expertise and resources to deliver a health orientated initiative not usually undertaken by NRW or WTSWW.

Those who attended benefitted in terms of their mental and physical health and well-being, whilst also raising awareness of local environmental pressures and nature conservation. The project delivered some environmental gain and community resilience through enhancement for protected reptile species and creation of firebreaks.

7.2 Wilder Health Trial Learning

These sessions identified the value of working with private and local businesses and initiatives. The trial also tapped into the outdoor fitness and volunteering market which has grown since Covid 19 lockdowns.

The sessions when combined with health and exercise messaging improved community awareness and connection with their local environment and with regular sessions could be a sustainable way to manage firebreaks within communities, whilst benefitting local businesses and participants' mental and physical wellbeing.

This is a model which could be incorporated into local business and third sector business models. There would be a need for support and strategic management of firebreaks around priority areas. This could be done in collaboration with a wider community-based wildfire and conservation project or supported through a local partnership.

7.3 Targeted Third Sector Engagement

We have built relationships with important stakeholders like the Ramblers Cymru and Welcome to our Woods. The aim was to work with established groups and organisations who also have a focus in our project area and our objectives – particularly the multiple benefits overlap. The idea being we share the knowledge around wildfire resilience with stakeholders who have good membership or established engagement and long term funding in the area – to “train the trainer” and ensure long term guidance and understanding of wildfire issues with these key stakeholders.

This is a method used by a variety of wildfire awareness programmes around the world, including the Landworks Firewise programme in South Africa. Recognising the need for long term messaging but recognising limitations to maintain separate and additional events specifically on wildfire community awareness is not sustainable.



Photo: Llais y geodwig workshop and Ramblers Cymru talk and Walk poster. *Photo credit: Becky Davies*

7.4 Targeted Third Sector Engagement Learning

Working with others who have strong and established networks is rewarding and beneficial to both parties. Working with established groups and building in a culture of awareness and resilience around wildfire, the management of the land and valuing the landscape we live and play in.

This strategy is effective, we will be sharing further guidance notes with the community group stakeholders we have engaged with from the project lifetime. However, in order to build understanding further and ensure a wider cover in South Wales and the rest of Wales a bespoke training session and guidance note would need to be developed and shared. A programme designed to train and disseminate this information is required to build into the community and culture. Resources to role this out to a wider stakeholder group would be required.

7.5 Hengoed Community Engagement

Hengoed was identified as a priority community, highlighted by the South Wales Fire and Rescue Service due to the frequency of wildfire in the land immediately adjacent to the community. There was also a wildfire incident where wildfire reached the properties and houses narrowly escaped structural fire. A significant number of properties in the area were housing association, with community liaison established. The project with the SWFRS has been cutting strategic firebreaks and footpaths as firebreaks for 2 years prior to working directly with the community. We had received good in person feedback from the community when cutting the firebreaks. Therefore, it was felt this would be a great community to have an in-depth discussion and support local action on the ground. An engagement strategy was developed, and a series of engagement activities were delivered.

The engagement approach was presence on-the-ground, intensive engagement to embed a Firewise like approach across the community. Engagement included; Community voices assessment with Co-production Lab Wales, Show-and-tell SWFRS machinery, Leaflet drop, Paws on Patrol and working with local schools.



Photo: Hengoed community event. *Photo credit Hannah Hughes.*

The events at Hengoed were generally unsuccessful, not due to lack of effort, but some key circumstances and community apathy. Engaging with the communities in the affected areas was a huge challenge, there was simply no interest from individuals and trying to access organisations to support individual engagement was also very difficult as they were unresponsive to communications. This was potentially due to competing obligations and budgetary pressures. We abandoned trying to get community members to attend in person events hosted by the project and instead took the approach of going to where they were (local events, schools etc) rather than expecting them to come to us. This did not yield better results, people showed very little interest in the topic despite offering incentives for people to get involved e.g. Time Credits. Whilst this is disappointing, this has allowed us to gather a lot of useful evidence and learning from the exercise.

Working with Co-production Lab Wales we explored ways in which we can engage with the community. Valuing people's time and encouraging participation through offering incentives were highlighted as an important mechanism to work with communities, particularly where there are high levels of deprivation. However, we struggled to follow through with this due to NRW policies on gifting. It is worth noting here that the National Principles for Public Engagement¹⁰, endorsed by Welsh Government recommend remuneration wherever possible but often this is challenging to deliver for public bodies such as NRW. The current policies in NRW prohibited us to work with incentives like local time credits.

We worked with local primary school Derwyn Deg, close to the demonstration site. We worked with a small social enterprise that writes children's storybooks with local community

¹⁰ <https://www.carmarthenshire.gov.wales/media/1216275/pc-national-principles-poster-en.pdf?v=201811011431350000>

groups, Petra Publishing. Together with the primary school a storybook was developed over a series of weeks. The publishing company then write and publish books, developed through the sessions. Members of the Healthy Hillides team attended sessions to open a discussion about the impacts and behaviours around wildfire. The books have then been distributed through the school and across all primary schools in the Project area.



Photo: Book launch Derwyn Deg Primary School, June 2023. Photo credit: Becky Davies

A survey was launched for circulation at events and on social media, with the option to have a chat with the Healthy Hillides Officer included. The aim was to understand the best ways that we can:

- Support residents to take steps to protect their homes and gardens to reduce the risk from wildfire.
- Support them to safely access and enjoy your local green spaces e.g., Y Graig
- Support landowners and managers to adopt plans that are equally beneficial to both them and the communities that neighbour their sites.
- Engage local people in preventing the causes of wildfire.

The response rate was extremely low (8 responses), despite considerable effort to circulate and actively engage. This highlighted the lack of interest in the issue from the public. This is mirrored by a number of other engagement lead objectives in other local projects.

7.6 Hengoed Community Engagement Learning

Working with incentives is a recognised way of working with communities, this has been successfully used through a variety of different projects, offering vouchers for local amenities and businesses. This is also a recommendation of programmes like the Landworks Firewise South Africa, which also work with communities of economic deprivation. More groundwork needs to be put in for the communities affected to want to engage, this takes more time than the project had, especially given community working off the back of covid.

The targeted educational sessions with the school were very successful and created a great product. These sessions were over a course of a few weeks rather than a “one off.” This also produced a product which can be revisited and more widely circulated to a key audience.

We had challenges with resources by the SWFRS – this will always be a challenge with an under resourced public service and a reactive service – which may be called out at any time. This makes it unlikely to have a sustainable model to have timetabled FRS attendance – though a dedicated programme with resources could incorporate this learning and be built into community engagement.

Closer working relationships with housing associations in the identified risk areas will be essential, along with other stakeholder organisations such as the local authorities, developers, schools, third sector organisations. To ensure long-term sustainability, collaboration will be key.

7.7 Gurnos Community

The Gurnos Graig site was an identified demonstration site in the development of the Healthy HillSides Project. However, development works for the Welsh Government road improvements of the A465 have been underway on the site for the duration of the project. This site was identified by the SWFRS due to persistent wildfire, high levels of anti-social behaviour and close proximity to communities, again communities of high economic deprivation. There is additional risk from this site as any smoke from wildfire incidents can cause secondary incidents on the busy A465 road.

Due to the development works on a third of the site and management of the site by the developers, we had to adapt to this and worked with the developers to embed long term wildfire resilience on site, to reduce risks of smoke onto the road and therefore wildfire on the site. Working with the developers and identifying prevention measures on the ground were shared and accepted into the footprint of the development. This was done in discussion with the Merthyr Tydfil planning authority whose planning permission manages the development.

There are a number of established networks and groups on the Gurnos housing estate. We worked with these networks and attended a series of meetings and events which we could build in wildfire and environmental messages. Through this network we engaged with a variety of different stakeholders and attended several community events giving opportunity to share the messages around wildfire and community resilience.



7.8 Gurnos Community Engagement Learning

Here we took a lot of learning around the planning process. This was previously discussed in project development as a gap in the landscape and community resilience around wildfire. We could have rationalised removing this site from the project but felt as we had identified this gap this gave a good opportunity to learn about how we could build in wildfire resilience into developments through the planning process. There are no statutory requirements to build in wildfire. FRS are not statutory consultees and development control takes on structural fire health and safety requirements.

Under Climate Change scenarios, wildfire is a growing risk and therefore there is a need to build in wildfire guidance and resilience through development planning. In countries where there is a history and more prevalent risk and impact from wildfire, planning law builds in Wildfire mitigation, particularly in the rural-urban interface. In Northern Ireland wildfire advice is picked up through landscape architects' planning consultation responses, building in mitigation in the landscape in an appropriately sensitive way.

Working within community networks and trusted community peers was an effective way to work with communities in a key area. However, this does require dedicated and consistent resources to maintain this relationship. These relationships are also much more than the key objective and beneficial for wider community and environmental benefits. This is an approach which would be good for sharing and training key peers on the key messages, so the learning is kept in the community, embedded into the community, and added to other agendas. This aligns with the Landworks Firewise South Africa model and the Egin¹¹ model peer to peer approach.

7.9 Community Wildfire Resilience Workshops

¹¹ <https://egin.org.uk/learn-more/>

Through the evolving engagement programme, particularly in our learning around how and who to engage with for long term messaging and embedding of wildfire mitigation and resilience we came to the conclusion that it is most effective and sustainable to work through community enablers and support people; being community group and network leaders, housing associations, housing and community officers, councillors and community risk managers.

We developed a stakeholder assessment around this new criteria to undertake an initial discussion to learn from these stakeholders, to understand the opportunities and challenges for this already over stretched resource. These are people who have significant demands with high levels of challenges including other antisocial behaviour and low resources, but they are based within and work closely with communities.

We held 2 in person sessions with 14 people in attendance. Whilst we were hoping for greater numbers, the discussion and learning was rich and was useful in expanding our engagement and informing this piece of work. To build on this discussion we repeated the session online. This gave us a further 15 stakeholders, which again provided learning informing recommendations for future community resilience needs.

Through these workshops a series of questions were asked to the stakeholder groups:

- What do you think are the challenges when it comes to tackling wildfire in our communities?
- Who do you think is currently responsible for wildfire management?
- Who do you think should be responsible?
- What can you do to mitigate dangers to homes?
- How do we engage communities?
- What resources needed to address these challenges?

There were a variety of answers and discussion across the 3 different workshops. Some themes which were highlighted through the discussions and feedback were:



Llais y Goedwig and Wildfire Wise workshop outputs.

- What do you think are the challenges when it comes to tackling wildfire in our communities?
 - Community apathy and acceptance of the problem.

- Building local knowledge and understanding
- Available resources and funding
- Government bureaucracy to deliver on the ground.
- Who do you think is currently responsible for wildfire management?
 - The Fire and Rescue Services – but don't think this should be the case.
- Who do you think should be responsible?
 - Multi organisation approaches and collaborative working on the ground, but to be lead and ownership by Welsh Government.
 - Should be better built into regulation and strategic planning such as development.
- What can you do to mitigate dangers to homes?
 - Community education and awareness
 - Local firebreaks next to communities
 - Defendable spaces within and around communities
 - Communities knowing what to do
 - Resilient infrastructure and landscape features – i.e. traditional stone walls – opportunity to train local people in traditional dry stone walling etc.
 - Landscape signage
- How do we engage communities?
 - Working with youth groups, outdoor recreation providers
 - Peer to peer working
 - Story telling and share local experiences
 - Have joined up community safety events which highlight multiple risks and negative behaviours.
 - Better use and youth orientated social media – e.g. tik tok videos.
 - Be positive
 - Better understand communities to drive behavioural change
- What resources needed to address these challenges?
 - Long term embedded resources and funding to tackle root causes and build awareness of key issues like wildfire.
 - Build capacity and capabilities through existing groups and peers – training and education.
 - Attend and educate through community meetings.
 - Messaging to cover health, social and environmental impacts.

7.10 Community Wildfire Resilience Workshop learning

The learning from this group was rich and did echo our learning from other countries and more general stakeholder discussions, where wildfire is a symptom of a wider complex problem associated with communities of high economic deprivation. Wildfire goes hand in hand with other challenges like fly tipping, community pride, cost of living and education.

A lot of opportunities and challenges around other problems were also identified, so linking up issues and having community leads knowledgeable about connected issues and possible multiple benefits to build into different initiatives was also identified as an opportunity.

Building capacity, knowledge and resources in this stakeholder group is the best opportunity to support community behaviour change and to have widespread messaging and mitigation built into the present initiatives or infrastructure. The resources or capabilities are not currently in place and additional resources will be required to train and action key mitigation measures within communities.

The discussions across this stakeholder group were helpful in better understanding community perceptions on wildfire, there is a need for education across communities, though it is recognised that school education is most effective at embedding learning through the community. The groups' perception is that wildfire is only started by young people, but care must be taken to not "tar all young people with the same brush." Positive messaging to young people is important, particularly where there is deprivation and negative attitudes with young people.

It should be noted that it is the community perception that it is young people who start fires, where are our project and the Fire Services do not single out young people but highlight that; wildfire is started deliberately by all ages. The value in youth engagement, particularly through outdoor recreation and activities was highlighted as an important means of engagement with multiple benefits but is often undervalued and resourced as part of integrated approaches. This echoes the learning of our Wilder Health trial and the opportunity to work across different sectors for multiple benefits.

7.11 General Public Engagement

There are different audiences and ways in which you can communicate wildfire messaging to the general public. There are many different ways observed globally and this depends on the wildfire exposure and severity. In Wales we do have a growing risk to wildfire and data shows that the wildfire problem is growing, particularly in the South Wales RUI.

We have managed social media accounts throughout the project, and this has had varying success. We have a Healthy HillSides Facebook¹² account, which is primarily used to communicate at community level, this has good contacts within local community networks and used through community hubs for local information. This is also where local discussion is held on wildfire incidents or discontent at specific issues. We have a @HillSides_Wales twitter¹³ account which we have had good traction, particularly across professional organisations within Wales, UK and internationally. We have had good reach with our Twitter account particularly in the 2023 spring wildfire, with posts getting regularly well over 1000 views and videos getting 5000 plus views – giving us a wide audience.

¹² [Healthy HillSides- Llethrau Llon Facebook Page](#)

¹³ [Healthy HillSides | Llethrau Llon \(@HillSides_Wales\) / Twitter](#)



Photos: Social media posts

Through stakeholder discussions there has been a consistent message and narrative around behaviour change, social responsibility, and awareness missing from large parts of society and this could be better reflected in an updated Countryside Code, which NRW are currently looking at on behalf of the Welsh Government, following the updated English Countryside code¹⁴ in 2021. It was felt by stakeholders particularly recreation groups that there was a place for stronger messaging through the Countryside Code to cover messaging around wildfire and wildfire mitigation or preventative messaging.

Working closely with Dawns Glaw¹⁵ social media and messaging is an established general and wide public communication platform. This is an established brand and wildfire messaging platform managed by Mid and West Wales Fire and Rescue Service (MWWFRS). The findings of the Healthy Hillides Project will be shared with Dawns Glaw and will hopefully inform further communications through the general public. Through the Wales Wildfire Charter being developed through the Wales Wildfire Board where communication is a key work strand to build consistent messaging across Wales with a *“One Voice approach to Wildfire messaging and awareness”*

7.12 General Public Engagement Learning

The lessons learned through general messaging should be shared widely and should inform the Wales Wildfire Charter and grow a consistent public messaging programme across Wales. This can be built into other recreation, environmental and tourism communication plans, and campaigns.

For community messaging on a local scale Facebook is the better mechanism for connecting with local stakeholders and building future local networks for individual community schemes. Twitter is a better platform for professional community, sharing best practice, evidence across Wales and the UK and sharing international best practice bringing the lessons from countries further along in their journey in integrated wildfire management to Wales and the UK.

¹⁴ [The Countryside Code: advice for countryside visitors - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101444/countryside-code-2021.pdf)

¹⁵ <https://www.mawwfire.gov.uk/eng/newsroom/current-campaigns-and-consultations/dawnsglaw/>

8 A Wildfire Wise – Community Approach

Throughout the Healthy Hillside project there have been a wealth of discussion across different networks and communities to inform a series of recommendations to me taken forward through identified stakeholders, in general and key partners such as Welsh Government, the Fire and Rescue Services and Natural Resources Wales.

However, there needs to be recognition that there will be a need for different approaches to different communities and this project reflects the discussions which have primarily taken part within the South Wales Valleys as the place in Wales with the highest number of wildfire incidents.

In south Wales there is a history of antisocial behaviours, deliberate wildfire, and high levels of socio-economic deprivation. These are also the communities who have high levels of health deprivation and poor education. However, there are also close ties across communities, there are frequent community events, local groups, and initiatives to work with to connect with communities.

9 Wildfire Risk Mapping

A wildfire risk map has been developed through the Healthy Hillside Project. Using the local knowledge, habitat data and incident data, we have created a map which highlights “hotspots” where there is likely to be a higher risk of wildfire. This tool has been developed in discussion with partners with an objective to highlight areas where wildfire risk is high and therefore mitigation measures and consideration is required to support community safety, environmental protection, and risk management. Accompanying the map there is a risk assessment and suggested interventions to put in place to assess the ground conditions, the potential risks and receptors and to support local wildfire risk assessments.

It is the aim that this map will indicate where there may be increased risk, due to the fuel loads and historic data. This tool is not aimed to create certainty of future wildfire incidents, but to inform and guide key stakeholders of the potential risk and open discussion on mitigation measures on the ground, through engagement, training or strategic risk management as appropriate.

It is hoped that this tool will be used by many and the opportunities to support strategic planning and local risk management will evolve through ground truthing and use. Some suggested community uses for the wildfire risk map to prioritise engagement and preventative measures include:

- Planning consultation and wildfire resilience advice
- Housing association, Local Authority Housing strategy objectives
- Climate resilience planning
- Peer-to-peer lead community engagement programmes

- Increased and sustained community education (schools, 3rd sector organisations, PSBs, Community Councils, public services).
- Green space, amenity land, roads and active travel route mitigation interventions.
- FRS and community safety messaging
- Targeted campaigns – for land management, waste management, access management etc..

10 Discussion and Recommendations

10.1 Strategic consideration of Wildfire

Despite the significant numbers of wildfire incidents in Wales, with hotspot areas like Rhondda Cynon Taff and the wider South Wales Valleys there is a need for Local Governments, Welsh Government and Risk Assessments to acknowledge the wildfire risk to communities from health impacts to risk to life. This has been acknowledged through the Wales Wildfire Charter.

Wildfire has only recently included in the Wales Climate Change Risk Register and is to be included for the first time in the Health Effects of Climate Change (HECC) report (to be published in 2023) written by the UK Health Security Advisory Board. However, the threat of wildfire as an impact of climate change needs to be better acknowledged and resourced due to its impact to communities and nature. As part of the Well-being and Future Generations Act, there is a requirement under Section 38 to take account of the UK Climate Change Risk Assessment as part of Well-being Assessments. In undertaking their assessments, it is recommended that wildfire is assessed, particularly where wildfire is currently a challenge and therefore likely to increase in risk under climate change scenarios.

Recommendation 1: Inclusion of Wildfire community resilience in climate adaptation plans, policy, and strategy at all levels by Welsh Government, Local Authorities and Public Service Bodies, with adequate resourcing to ensure the latest evidence and best practice on wildfire mitigation for community resilience is being included in climate adaptation planning.

Where wildfire is a persistent challenge and there is evidence to demonstrate a higher risk – rural-urban interface, poor land management/high fuel load, high frequency, and severity of wildfire incidents this needs to be considered in strategic planning, locally and regionally. This is a planning consideration in many countries across the globe and has been highlighted through the Landscape Fire Governance Framework¹⁶. NRW has acknowledged the wildfire risk through the South Wales Area Statement and inclusion as a local objective in Forest Resource Plans¹⁷. Inclusion of wildfire mitigation and grounds maintenance through planning permissions and upgrading of infrastructure in priority places will ensure

¹⁶ [Framework \(wildfire2023.pt\)](#)

¹⁷ [Natural Resources Wales / Lower Rhondda Forest Resource Plan](#)

communities are better prepared for wildfire in the long term. This was highlighted as an important future wildfire resilience action through our community workshop discussions.

Recommendation 2: Wildfire resilience is incorporated into strategic local and regional planning. Specific mitigation measures for local planning decisions should be required for public safety. Appropriate planning guidance should be developed to guide planning authorities and developers in building wildfire resilience into future development in wildfire hotspots.

Wildfire is a symptom of wider issues, this has been a repeated description about deliberate wildfire, particularly in the South Wales Valleys. It was highlighted in a number of community discussions the need for a bigger picture and ensure where there are persistent wildfire incidents that this be considered in wider service management.

Wildfire is often associated with waste fires and then the increased risk to properties where waste is stored close to properties. Waste collection and the streamlining of waste management and the control over recycling centres was highlighted where fewer collections put pressure on local communities, particularly where there are lower incomes, where there is no means of taking refuse to recycling centres as an example. This highlights the need to work across functions within Local Authorities or any community service as the seemingly unconnected issues can increase risks in wildfire hotspots. Appraising a site or community through a risk assessment would support linking services and identify mitigation.

Recommendation 3: Community service provisions should build in wildfire awareness in wildfire hotspots, risk assessments within communities can highlight key mitigation measures to reduce risks.

Findings from our trials working with communities and through our stakeholder focus workshops identified a need to train and inform community service providers and community leaders. Through this, embedding wildfire and wider climate resilience for communities can be made more sustainable and place appropriate.

Recommendation 4: Design a training and awareness programme for key community stakeholders; housing associations in high-risk areas, developers, schools, third sector organisations. To ensure long-term sustainability and resilient working relationships.

10.2 Community Wildfire Resilience, Education and Action Programme.

We have looked at examples from around the world and have looked at ways of working trialling different approaches in the South Wales Valleys. The initial ambition was found to not be appropriate or suited to the communities in South Wales – it may be better suited to other parts of Wales.

Through the trial approaches and the lessons learned from international examples the consistent message is that there is a need for dedicated resources. Given the socio-

economic demographic of most of the worst affected communities government funding to build proactive and preventative measures linked to other infrastructure and actions such as fly tipping is required to develop, train, and deliver a community wildfire resilience programme, we have called Wildfire Wise Wales.

The learning from this work and many other projects where community engagement is a principal aspect highlights the importance of a long-term approach. To build trust and relationships with communities it takes time. This is an important factor and therefore needs to be reflected in funding and resources. This will support long term behaviour change and can be built in with other messaging and multiple benefits.

This project and other community wildfire programmes demonstrate the value of working with those trusted and known within communities. Identifying opportunities to potentially recruit people already embedded in those communities, for paid roles to pro-actively have conversations in their communities about wildfire would be beneficial. This way of working has been demonstrated in other projects which have shown peer-to-peer champions to be an effective way to gain buy-in from communities as these individuals are already known and trusted. This type of approach has been used to address challenges in a variety of sectors where there has traditionally been a lack of engagement with marginalised groups.

A great case study in this is the evaluated Kirklees vaccine project¹⁸, where peer-to-peer engagement supported increased Covid-19 vaccination. Working closely with supporting organisations to embed this way of working would be effective, the Egin Renew¹⁹ programme is an excellent example of where this is being effective to support positive behaviour change within communities.

Preventative measures on the ground can also contribute to improved access, waste management, nature recovery, health, and fitness in addition to wildfire risk reduction.

Long term behaviour change is required, better understanding of root causes and perceptions is required. There are many studies undertaken which looks at perceptions, however a practical co-productive appraisal has not been undertaken – this would allow for a more tailored approach to tackle wildfire but other antisocial behaviour issues to be looked at through long term behaviour change.

Recommendation 5: A long term funded and resourced central programme to be rolled out to prioritised communities throughout Wales. Based on the train the trainer and peer to peer mentoring to embed training, awareness, and knowledge within communities by trusted and familiar community leaders.

Recommendation 6: Share the findings of the Healthy HillSides Project as guidance to support local communities to understand and undertake risk assessment and mitigation on the ground to reduce community risk and build resilience.

¹⁸ <https://tslkirklees.org.uk/tsl-kirklees-community-champions-evaluation/>

¹⁹ <https://egin.org.uk/learn-more/renew-wales/>

Recommendation 7: Any programme building community wildfire resilience should build a programme around incentives and tangible community benefits and opportunities.

Recommendation 8: Undertake a behavioural insights appraisal within the community to better understand the challenge.

10.3 Fire and Rescue Service Community Services

Throughout the project we have struggled with resources from FRS community safety teams, this being a product of chronic under funding and the challenge of wildfire as a product of wider antisocial behaviour problems. As highlighted through our focus group discussions and wider stakeholder discussions throughout the lifetime of the project, wildfire is an issue for many not just the Fire Services. We acknowledge there are opportunities for all key stakeholders to better embed working with communities for prevention and reduced wildfire risk.

There is precedence of preventative measures being embedded into the FRS, seeing culture change and a shift towards prevention in the strategic model of the FRS. Building in external property advice into community visits is essential alongside community ownership added risk to wildfire from behaviours around waste management and property management. We have found that communities do respond to and automatically expect fire messaging to come from the FRS. External property/wildfire advice for communities should be on a risk basis and could be priorities using the newly developed Wildfire Risk map.

Recommendation 9: In high-risk areas and for best practice, all FRS to include external property check lists to home safety visits, this would be added to the already in place internal checks for risk reduction include garden and exterior home advice.

10.4 Outdoor Interests

There are many initiatives developed, funded, and undertaken through a variety of different third sector and private business across Wales and there are many missed opportunities to build in wildfire mitigation as part of land management or an activity. The wildfire mitigation measures can be incorporated into volunteer action simply, requiring minimal advice from FRS or a designated wildfire contact alongside guidance.

We have developed a brief guide which identifies simple measures and on the ground actions which can be incorporated into a variety of different activities around outdoor recreation, volunteering, or community projects.

Recommendation 10: Provide a guide to stakeholders on how to embed and incorporate wildfire plus resilience through projects delivering public good.

Recommendation 11: Ensure outdoor recreation providers are identified as stakeholders and ensuring engagement opportunities through outdoor providers are built into community engagement, particularly where there is a landscape, youth, health or environmental benefit.

10.5 Wales Wildfire Charter

Wildfire community messaging examples across the world have consistent messaging and core principles. Whilst there are different ways of working and approaches in different countries there is consistency in principle and core messaging. Across Wales there is a need for consistent messaging across general public and advice to public services supporting communities through guidance, training and advice, based upon best practice being developed in Wales, the UK and internationally.

Recommendation 12: Through the Wales Wildfire Wales Charter consistent and accessible messaging to the public, and communities is required with simple mitigation measures which can be echoed locally by local authorities, community leaders and support agencies.

