### Report Amendment Notice

Scope: NH004 > NH204 - Natural Hazards - Wild Fire Risk

On the 18<sup>th</sup> of April 2018 a Preferred Options Report was taken to the District Plan Committee Meeting for endorsement.

All of the recommended preferred options in the Report were endorsed for further consultation.

However, while this District Plan Review process has been occurring, the Ministry for the Environment has released a National Environmental Standard for Plantation Forestry (NES-PF) which became operative on the 1<sup>st</sup> of May 2018. This Standard has implications on the content of this Scope.

Therefore, it is relevant to note that this consultation will only include the amended Preferred Option Report, with the agenda report being available on the Selwyn District Plan Review Website. This amended report allows for the requirements of the NES-PF. These amendments were confirmed with the Committee verbally during the presentation of the Preferred Option Report.

The amendments only relate to the compulsory requirements of the NES-PF, which requires a District Plan to not be inconsistent, or in conflict with it. This amendment primarily deals with the setback between dwellings and plantation forestry.

The amended Preferred Options Report have been attached to this email, but to review the District Plan Committee Meeting Minutes please see <a href="https://www.yoursay.selwyn.govt.nz/selwyndistrictplanreview">www.yoursay.selwyn.govt.nz/selwyndistrictplanreview</a> for further details.

To discuss the preferred options endorsed by the District Plan Committee please contact Robert Love (Strategy and Policy Planner) at <a href="mailto:Robert.Love@selwyn.govt.nz">Robert.Love@selwyn.govt.nz</a>

# PREFERRED OPTION REPORT TO DISTRICT PLAN COMMITTEE

DATE: 18 April 2018

TOPIC NAME: Natural Hazards

SCOPE DESCRIPTION: NH004 Wild Fire Risk

TOPIC LEAD: Robert Love

PREPARED BY: Robert Love

### **EXECUTIVE SUMMARY**

| Issue(s)         | The key issues for this topic are:   |  |  |  |
|------------------|--|--|--|--|
|                  | <ul> <li>That there are no provisions within the Operative District Plan addressing wild fire risk, and no ability to consider it as a matter of control or discretion when assessing a resource consent.</li> <li>Resource consents have increased the fire risk on properties through</li> </ul> |  |  |  |
|                  | inappropriate conditions, which have arisen as a result of the above point.  |  |  |  |
|                  | - Conflict when balancing the need to allow for defensible space to be created, and the need to mitigate adverse amenity effects through vegetation screening.   |  |  |  |
|                  | - Selwyn is an area with a significant fire risk with wild fires occurring most years.   |  |  |  |
| Preferred Option | Option 2A: All new principal buildings should be setback from existing vegetation stands.  |  |  |  |
|                  | Option 2B: Non NES-PF plantation forestry and other vegetation should be setback from existing principal buildings and non-rural zones.  |  |  |  |
|                  | Option 2F: Restrict the placement of shelter belts and amenity plantings near neighbouring principal buildings.  |  |  |  |
|                  | Option 2H: Include in the matters of control and discretion the ability for the Consent Planner to assess the wild fire risk of amenity and landscape plantings.   |  |  |  |
| DPC Decision     | "That the Committee endorses the Preferred Options 2A, 2B, 2F and 2H for Wild Fire Risk for further development."  |  |  |  |

### 1.0 Introduction

The Operative Selwyn District Plan does not contain any provisions to ensure that the risk to life or property from wild fires is appropriately managed. This is particularly topical following the Port Hills Fires of 2017. The operative District Plan does not contain any provisions detailing how this risk is to be managed, and in some circumstances could be a proponent in raising the risk to people and property through inappropriate vegetation screening requirements.

While the Port Hills, Malvern Hills and the high country have high levels of fuel loadings and topography that assists in the spread of fire, the sparseness of population means there is a lack of triggers. The high fire risk area of the Selwyn District is within the rural plains area and particularly around 'lifestyle blocks'. These areas tend to have high fuel loadings either due to poor maintenance, or naivety to fire risk, a high value in property and people, and a large amount of triggers. The high risk of this area has been highlighted by the regular occurrence in recent history of wild fires. Given the presence of this natural hazard risk, the District Plan needs to enable the reduction of this risk through appropriate land management.

An additional matter that gives this scope importance and acts as a driver for mitigation, is the effect that climate change is having on fire risk. FENZ data shows that fire risk within the Selwyn, and particularly in the inner plains area, has an increasing trend. The District Plan review process is an ideal time to review the current provisions and situation, and produce mitigation to reduce either risk of fire, or the consequence of one.

Some questions have been raised by the community regarding the potential for conflict between providing a defensible space free of vegetation around dwellings, and District Plan provisions requiring the mitigation of visual effects, often through landscape planting. It is an action of the Selwyn District Council Port Hills Fire Recovery Plan 2017 to consider a package of provisions that specifically address wild fire hazard in high risk areas through the District Plan Review.

The scope of this work is to identify methods available for reducing fire risk to people and property, and consider the appropriateness of including any of these in the proposed District Plan.

Consideration will be given to whether the methods would conflict with the amenity mitigation methods in the proposed District Plan and how this conflict can be managed.

Under section 30(1)(b)(i) of the Resource Management Act 1991 (RMA; Act) territorial authorities have the requirement to control the actual or potential effects of the use and development of land including for the purposes of avoidance or mitigation of natural hazards. The Territorial Authority can achieve this through creating rules controlling land use and development within the District Plan. In the proposed District Plan context, this scope of works seeks to achieve this RMA requirement, through identifying defensible space requirements.

Defensible space is considered to be an area around a structure that has been landscaped and maintained in a way to reduce fire danger to the structure. This space improves the chances of people and property surviving a wildfire. This space is also key to the protection of firefighters defending the structure.

This scope of works does not include the specific provision of access for emergency vehicles, water storage, water storage couplings, or the supply of water for firefighting purpose, as this has been covered within the Emergency Services scope of works.

Additionally, this report should be read with the Baseline report prepared for this scope.

# 2.0 Summary of Issues

In summary the issues that arose through this scope investigation are:

- That there are no provisions within the Operative District Plan addressing wild fire risk, and no ability to consider it as a matter of control or discretion when assessing a resource consent.
- Resource consents have increased the fire risk on properties through inappropriate conditions, which have arisen as a result of the above point.
- Conflict when balancing the need to allow for defensible space to be created, and the need to mitigate adverse amenity effects through vegetation screening.
- Selwyn is an area with a significant fire risk with wild fires occurring most years.

# 3.0 Statement of Operative District Plan approach

As previously stated there are no provisions within the Operative District Plan expressly dealing with the creation of defensible spaces around properties. However, below are the provisions most relevant to this Scope.

Rule 2.1.1 allows for certain types of shelter belts and amenity plantings, however none of the permitted standards restrict the location of the vegetation in relation to its proximity to other properties, other than to avoid tree shading. If an activity fails to meet the permitted standards it may be classified as a restricted discretionary activity, which does have a matter of discretion detailing the approval of a fire management plan (2.1.3.6).

Guidance contained within the Operative District Plan states that to mitigate against the risk and spread of wild fires within plantations, fire management plans are required for large plantations. However, the permitted rule for plantations (Rule 2.2.1) has no requirement for a fire management plan to be prepared. Only if an activity breaches a permitted standard is a fire management plan a matter of discretion (2.2.3.9). Additionally, there is no definition of what a 'large' plantation is.

Therefore, given the above two situations there is currently a reliance on an activity breaching a permitted standard before fire risk is considered.

Unfortunately the Plan does not provide any guidance on what a fire management plan should contain.

It is also relevant to note that on sites containing listed protected trees, there is no permissible method of reducing fire hazard other than removing branches less than 50mm in diameter on the lower third of the tree. This may still leave significant fuel for a fire, and any remaining vegetation may act as a ladder for the fire to spread.

Regarding the erection of dwellings and principal buildings, there are no provisions requiring that they be built a certain setback from plantations, or other wild fire risk factors. There is no requirement under the Operative Plan to have a defensible space around the dwelling.

If a building is erected with consent within an Outstanding Natural Landscape (ONL) or Visual Amenity Landscape (VAL) area, then a matter of control or discretion is the landscape planting that will assist in mitigating any adverse visual effects. This matter has been reserved to provide screening or other visual mitigation of built structures within areas or particular landscape significance. Part of the screening may require vegetation within the defensible space area, meaning that consent requirements could be increasing the fire risk to the dwelling.

The District Plan does have indigenous vegetation clearance rules which state that some limited amount of clearance subject to particular conditions is permitted (Rule 9.21.1). On review of the permitted standards, the amount of clearance necessary in order to create a defensible space should not breach the standard, although any clearance within 20 metres of a waterbody needs to be less than  $100\text{m}^2/\text{ha}$ .

As already highlighted, consent conditions requiring the screening of built structures with vegetation have the potential to increase the wild fire risk to that property. Consent conditions requiring this vegetation, may prevent the land owner from creating a defensible space. Given this, a review of the relevant resource consents within the Port Hills area was conducted to identify if this situation has occurred.

The review found ten properties within the Port Hills area being subject to consent conditions that cause a significant increase in fire risk to the structure, and an additional ten properties with consents that cause a moderate increase in fire risk. A high risk classification was considered for properties that have their defensible space severely compromised by conditioned landscaping, and moderate risk being properties with some uncertainties on the effectiveness of their defensible space due to potential inappropriate landscaping conditions. This would indicate that historically, when consent applications have been assessed, no fire risk assessment has been made. In the district plan review context, it is important to ensure any proposed screening rules provide an appropriate balance between avoiding any increase the fire risk while still achieving sufficient visual mitigation.

On discussions with SDC Consents staff it was determined that additional matters of discretion to allow for the assessment of fire risk could be included in the proposed plan, rather than a change towards actively requiring specific defensible spaces through new district plan rules.

# 4.0 Summary of relevant statutory and/or policy context and other background information

#### 4.1 Canterbury Regional Policy Statement (RPS)

The most relevant provisions of the RPS have been included as an Appendix to the Baseline Report. However, in summary they deal with:

- a) Appropriate land use and development
- b) Protecting ecosystems and indigenous biodiversity

- c) Natural hazard identification and management
- d) Protection of outstanding natural features and other significant landscapes.

The natural hazards chapter (nine) provides the key policy direction when addressing hazard identification and management. The provisions within this chapter seek to avoid inappropriate development that would increase the risk of a natural hazard, or be particularly exposed to a hazard. For instance in reference to this Scope of Works, this stance in the RPS would support the District Council limiting the ability for dwellings to establish near plantation forestry and other wild fire risk factors.

The RPS does provide guidance (Policy 11.3.5) on how the District Council should base its approach when managing natural hazards, with this being achieved through general risk management. Matters to be considered are the likelihood of an event, the potential consequence from an event occurring, and where there is uncertainty a precautionary approach should be adopted. In the context of the District Plan Review, it is therefore considered that for those areas that have a reasonable likelihood of an event occurring and where there is a consequence to either life or property, then at risk activities should be avoided, or where they cannot be avoided mitigated against.

In a wild fire risk management situation, avoidance would be to prohibit the construction of properties in areas where wild fires occur. However, in recent history wild fires have occurred throughout the District not just in traditional high risk areas such as vegetated sloped land. Therefore, it would be unreasonable to attempt to avoid development on hill slopes whilst still allowing development in other areas with comparable risk. The next step is to mitigate against the hazard, and this is primarily achieved through vegetation clearance around structures. However, as the District contains various high value landscapes including outstanding natural landscapes which contain significant portions of biodiversity and high amenity values, vegetation clearance for the purpose of hazard management could come into conflict with RPS policies seeking to protect these landscapes and ecosystems.

Therefore, it becomes a balancing act between ensuring enough of the wild fire risk has been mitigated through appropriate land use and development, and not carrying this out in a way that removes significant indigenous vegetation, affecting the ecosystem, or causes adverse visual amenity and landscape values effects.

#### 4.2 Canterbury Land and Water Regional Plan (LWRP)

Much of the sloped land located within the Selwyn District is likely subject to high erosion risks and as such trigger Rules 5.170-171 of the LWRP. This rule places restrictions on what form of vegetation clearance can occur as a permitted activity. On review of the Rule, any vegetation clearance as required to create a defensible space would be permitted as long as the relevant standards are met. If this Rule cannot not be met, vegetation clearance becomes a restricted discretionary activity under Rule 5.171. The creation of fire breaks either by hand or machinery is considered to be a permitted activity.

#### 4.3 Fire and Emergency New Zealand Guidance

In 2017 the Government merged the urban and rural fire authorities through the Fire and Emergency New Zealand Act 2017, creating Fire and Emergency New Zealand (FENZ).

This Act has seen any responsibility held by the Territorial Authority under the now repealed Forest and Rural Fire Act 1977 removed. This responsibility extended to promoting and carrying out fire control

measures, making by-laws for the purpose of fire control, and keeping and maintaining a fire plan for the district.

FENZ are required to prepare local fire plans under section 22 of this Act. Unfortunately the local fire plan for the Selwyn region is still in a draft phase and was unable to be incorporated into this report. FENZ have stated that the report is due for circulation at the end of April 2018.

It is also relevant to note that FENZ are currently reviewing the Standards addressing water supply for firefighting and access provisions, which when published will need to be incorporated into the Proposed District Plan.

In 2009 the fire service released a revised manual to assist home owners in trying to reduce the risk to their homes from interface fire. The two main subject areas of this manual is guidance on defensible spaces, and on house building materials.

'Interface fires (where industrial, or residential property is located next to vegetation) can do tremendous damage, result in economic losses, and have significant social impact. Even the best-case scenario involved fire-fighting costs, the loss of adjacent vegetation cover, and some level of inconvenience. The worst case scenario may involve community evacuation, as well as the loss of property and life.'

'To reduce the potential of interface fire loss, we must all be more aware of the potential consequences of interface fire and share the responsibility for putting in place practical solutions. Home owners and residents are responsible for providing defensible spaces around their properties.'

#### <u>Defensible Space guidance</u>

The manual states that the first ten metres around the building is the priority one zone and the most critical area to consider. This area should be a fuel free space to the greatest degree possible which will give firefighters a good chance to save the building. This area should consist of lawns, paths, and drives. Any shrubs, trees, dead braches etc. should be removed. Additionally, this area should also be regularly mown and irrigated.



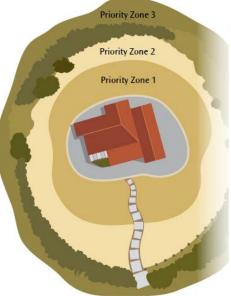


Figure 1: Fire Smart Home Manual 2009

Past the priority one zone, out to at least 30 metres, the area should not support high amounts of fuel for fires, through thinning and pruning vegetation. Any dead or dying vegetation should be removed as well as any understory litter. The vegetation within these zones should be spaced out by at least three to six metres for at least 30 metres from the structure. Any vegetation within this area should be of a low flammable type.

Past the 30 metre setback in the priority three zone large trees should be well pruned, and all braches less than two metres from the ground should be removed. Litter and potential fire ladders should be removed.

In all areas any vegetation overhanging or within three metres of powerlines should be removed. Any dead or dying tree within a tree length of a power line should be removed. Ideally powerlines should be subterranean.

Defensible space is more important on the downslope from any structure, and greater clearances should be provided for.

The manual also provides guidance on buildings within high hazard areas:

- a) Roof materials should not be wood, but steel or tiles.
- b) External materials should be brick, tin, or hardiplank.
- c) Vents, eaves, and window sills should be enclosed to prevent embers entering openings into the house.
- d) Windows should be over a smaller pane, and either be double glazed, or tempered.
- e) Plastic skylights should be avoided.
- f) Structures should ideally be located on flat slopes.

Whilst this report primarily deals with the creation of defensible spaces through the separation of the structure from fuel sources, embers can ignite a structure from around one mile from the actual fire front. This would indicate that 'hardening' the building is just as important as providing defensible spaces.

Guidance is also given on general garden structures and maintenance:

- a) Non-flammable materials should be considered for decks, trellises, balconies etc.
- b) Firewood should be stored at least 10 metres from the house and not downslope.
- c) Roof litter should be regularly removed to prevent ignition from airborne embers.

Regarding emergency response, the manual states:

- a) Access from the road for large vehicles should be provided, that is clear of overhanging branches. The access should be wide enough for fire engines, and clear four metres either side of the access way.
- b) RAPID numbers should be clearly displayed.
- c) Properties should have water storage/ ponds/ pools with appropriate couplings, good access, and clear signposting.
- d) If possible provide an alternative emergency access point to the property.

Based on the fire risk scoring chart contained within the manual, there is generally not one thing in particular that will result in a high risk situation, but a combination of factors. Some of the higher risk factors were wooden roofing, dense vegetation near the structure, drought conditions, and unirrigated gardens.

#### 4.4 National Environmental Standard – Plantation Forestry (NES-PF)

In 2018 Central Government released a NES for plantation forestry activities. On review of this Standard, there are no provisions addressing the wild fire risk of a plantation forestry. However, there are provisions within the Standard addressing other matters which could influence the degree of risk wild fire represents. These being a minimum 10 metre setback to boundaries, 30 metres from urban areas, and 40 metres to dwellings.

These restrictions only apply to afforestation over one hectare, and must be for commercial harvesting.

# 5.0 Summary of alternative management responses – Other Districts

#### 5.1 Christchurch City Council (CCC)

The CCC District Plan includes rules requiring property access suitable for firefighting purposes unless it is physically unable to (Rule 8.8.2). The Plan also requires that dwellings provide water to the required firefighting standards, regardless of whether the property is linked with the urban reticulated system, or is on rural supply.

In regard to providing defensible spaces the Plan does have provisions that attempt to provide a defensible space around properties through restricting the location of plantations by requiring them (Rule 17.4.2.8) to be at least 30 metres from existing residential units, building areas, or boundaries with residential zones. The Plan also includes setbacks for new dwellings and sensitive activities from plantation sites, with the required setback distance being 30 metres. These rules are limited to separation from plantations and do not require separation from other plantings.

The Christchurch District Plan does not address vegetation clearance as necessary to provide wild fire mitigation.

The Rural Zone rules include a requirement that dwellings be erected on 'identified building areas' however the assessment matters for this do not require consideration of fire risk.

#### 5.2 Ashburton District Council (ADC)

The ADC has not dealt with managing wild fire risk through the creation of mandatory setbacks between buildings and forestry. The only provisions that deal directly with fire, are provisions requiring adequate water supplies in compliance with New Zealand Standards. Indirectly, some of the site standards for the rural section will aid in mitigating wild fire risk. For instance residential buildings are required to be at least 20 metres from boundaries, this increases to 25 metres for commercial, accommodation, and retail buildings. However, tree planting provisions do not provide any mitigation, with the standards only requiring a separation of 2.5 metres to any internal boundary.

Furthermore, no specific vegetation clearance rules in relation to managing fire risk exist in the plan, only standard rules managing clearance in high value areas.

#### 5.3 Hurunui District Council (HDC)

The proposed Hurunui District Plan does not have any direct rules addressing wild fire risk, but the HDC have included provisions requiring setbacks for new forests. New forestry and wood lots are required to be setback at least 50 metres from a dwelling or principal building on a separate lot, and new dwellings are required to be located at least 50 metres from forestry plantations on a separate lot. Forestry is also required to be setback from any boundary by at least 10 metres.

Under the vegetation clearance rules, there is a permitted standard for vegetation clearance for the purpose of creating a firebreak, and when trees endanger human life, structures or utilities. Although the latter is most likely in regard to immediate risk from falling trees rather than from a potential fire risk aspect.

#### 5.4 Marlborough District Council – Proposed Marlborough Environmental Plan (MDC)

Commercial forestry is permitted subject to certain standards being met such as planting not occurring within 100 metres of any land zoned urban residential, rural living, or coast living, within 100 metres of a habitable structure or accessory building on any adjacent land under different ownership

Habitable structures or associated buildings within the Rural Zone are required to have a fire safety setback of 100 metres from any existing commercial forestry, woodlot, conservation planting, or carbon sequestration forestry on any adjacent land under different ownership (Rule 3.2.1.7). Furthermore, the standard specifies that any planting should be 30 metres from a formed and sealed public road (Rules 3.3.6 (3.3.6.2) & 3.3.8 (3.3.8.2), & 3.3.10 (3.3.10.1)).

| Authority | Forest setback<br>from existing<br>dwelling | Dwelling setback<br>from existing<br>forest      | Setback from roads | Forest Setback<br>from<br>boundaries |
|-----------|---|--|--------------------|--------------------------------------|
| CCC       | 30 metres                                   | 30 metres  | Nil                | Nil                                  |
| ADC       | Nil   | 20 metres (to<br>boundary rather<br>than forest) | Nil                | 2.5 metres                           |
| HDC       | 50 metres                                   | 50 metres  |                    |                                      |
| MDC       | 100 metres                                  | 100 metres                                       | 30 metres          | N/A                                  |
| NES-PF    | 40 metres                                   | N/A  | N/A                | 10 metres                            |

Table 1: Setback summary table

# 6.0 Summary of stakeholder engagement

Mahaanui Kurataiao Ltd (MKT), Environment Canterbury and Fire and Emergency New Zealand were all approached for comment.

MKT and Environment Canterbury's comments have been included and/or incorporated into the Baseline Report. Both parties had no issues with the proposed preferred options, other than MKT wishing to have

some involvement in the resource consent process where this involves vegetation clearance and replacement. This was requested to be in the form of engagement or notification.

A Fire and Emergency New Zealand representative, Tim Mitchell (National Manager Advisor Rural Operations) provided comment on this scope of work, which have been incorporated into this preferred options report. Overall FENZ are supportive of the recommended preferred options. In summary some of the matters raised were:

- The need to control plantations, shelter belts, natural stands and scrub vegetation.
- The potential for a high fire risk overlay to be inserted into the District Plan as guidance to residents.
- The importance of addressing fire risk when risk is constantly increasing due climate change.
- The need to consider fire risk as part of the typical environmental effects assessments for resource consent applications for certain activities.
- Where possible not allow for poor access outcomes which inhibit FENZ's ability to fight the fire.

# 7.0 Summary of Options to address Issues

#### 7.1 OPTION 1 – Status Quo

This option would see the very limited existing provisions dealing with wild fire risk remain. This would include the current consent assessment regime that has no ability to consider fire risk, and has resulted in instances where consent conditions have increased the fire risk of properties due to screening requirements. Furthermore, there are no restrictions on the location of plantation forests in relation to sensitive sites. For these reasons this option is not recommended.

#### 7.2 OPTION 2 – New and Amended Provisions

This option includes a suite of potential amendments that can be altered (e.g. setback distances) and adopted separately from one another.

In addition to the recommended options, it is recommended that all of the current relevant provisions within the Operative District Plan be revised and amended to improve clarity and coverage. For instance clearly defining when a fire management plan is required, and what a 'large' planation is. On this point FENZ has recommended that all plantations over 20 hectares should be classified within this category.

On the topic of fire management plans it is recommended that these be required for all non-rural businesses located within the rural zone, including rural based industrial activities and 'other' industrial activities, or at the very least for fire risk to be considered as a matter of discretion. An example of a rural based industrial activity having a fire risk that needs to be considered is composting, where under particular circumstances can ignite.

A point of clarification which needs to be made for the below options is what type of building should these options apply to. Should it only be certain types of buildings such as dwellings, commercial buildings, sensitive activities, or should all buildings be included. It is recommended that only buildings used for sensitive activities, commercial buildings, and dwellings should be incorporated into the setback provisions, with accessory buildings excluded.

Clarification of the extent to which the rules addressing vegetation separation and/or clearance for fire risk mitigation purposes is also required. A broad-brush rule would likely include too much vegetation and would be unworkable. It is therefore recommended, with the support of FENZ, that when considering separation distances involving vegetation that only plantation forestry, shelter belts, natural stands, and scrub land containing species such as gorse and broom be included. Whilst this method will not cover all areas of vegetation with an inherent fire risk, it should address the majority. An additional issue is about term usage and clarity, as these terms can be subjective. This issue would need to be addressed through the provision of clear guidance and definitions, which will be developed through the drafting stage.

#### Option 2a: Setbacks from new principal buildings to existing vegetation

This option has two components, the first being the setback to existing NES-PF defined plantation forestry, and the second being the setback to existing significant vegetation.

This option would see:

- Any dwelling being setback from an existing NES-PF defined plantation by 40 metres;
- All other principals buildings setback from existing NES-PF defined plantations by 30 metres;
- Dwellings and other principal builds to be setback from existing non- NES-PF defined vegetation by 30 metres.

#### Setbacks to existing plantation forestry

A rule such as this would provide for a defensible space between the principal building and an existing plantation forestry. The size of this setback is open to debate, but 30 metres may be an appropriate distance given the FENZ guidance and the distance used by the Christchurch City Council. In regard to the last point, consistency across territorial boundaries is important as operators will be working within both Districts.

The setback distance should be measured from either the stump line or the dripline of the trees, whichever is nearer.

This distance will allow for the creation of a defensible space which is adequate to help prevent the spread of fire from forestry to neighbouring structures.

#### Setbacks to existing significant vegetation

Whilst a buffer between new buildings and significant stands of existing vegetation would be beneficial in managing the potential wild fire risk, there is a complication as to what constitutes a significant stand of vegetation. This aspect is subjective and open to interpretation. Regardless of this, this aspect should still be further investigated as a rule controlling this matter in some form is recommended.

#### Effectiveness in Addressing Issue:

These rules would be effective in allowing for the creation of a defensible space by requiring buildings to be setback from significant areas of vegetation. However, it does rely on the landowner maintaining that 30 metre buffer in an appropriate manner to reduce wild fire spread.

As stated above, there is a difficulty in determining what a significant area of vegetation is, to broad of an interpretation could see all vegetation included, and to specific of an interpretation could see a minimal amount of vegetation considered.

#### Risks:

These rules would only allow for a defensible space to occur, it does not require that a defensible space be created, as it will be up to the individual landowner to manage the 30 metre space. If the space is inappropriately managed then wild fire can spread over this buffer.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions, and further investigation as to what vegetation should be included in the second part of this option.

#### Stakeholder and Community Interests:

These options will see the restriction on the location of buildings on landowner's properties, this directly affects the landowner's ability to develop their land.

#### **Recommendation:**

This option is recommended for further investigation and development.

# Option 2b: Setbacks of new or replanted non NES-PF defined plantations to principal buildings and non-rural zones

As per the above option, a rule within the district plan would assist in keeping a suitable distance between non NES-PF plantations and existing buildings (excluding accessory buildings) and non-rural zones. The distance of this setback should be consistent with the value adopted in Option 2a.

#### Effectiveness in Addressing Issue:

As per the previous option this would allow for a defensible space to occur between non NES-PF plantations and principal buildings. This option would seek to avoid the establishment of a plantation activity near a building, which would subsequently increase fire risk on that party.

#### Risks:

This option does not require that a defensible space is created, but only allows for the opportunity for one to be created. It is up to the landowner to maintain the buffer area in an appropriate manner.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

This option has a particular effect on owners and operators of plantation forestry activities, as this will restrict the amount of land available to them to plant trees.

#### **Recommendation:**

This option is recommended for further investigation and development.

#### Option 2c: Setback between principal buildings and internal boundaries

This option goes further than the previous two options in that a rule would require a 30 metre setback for any principal building from any internal boundary rather than just from a forestry planation.

#### Effectiveness in Addressing Issue:

This option would be effective in allowing for the opportunity for a defensible space to be created.

#### Risks:

This option does not require that a defensible space is created, it only allows for it to occur.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

This option would restrict the ability of the land owner to place a building on their site.

#### **Recommendation:**

This option is not recommended as it may unnecessarily restrict land development when no heightened fire risk exists (neighbouring land may be bare). It is favourable to use setbacks described in Option 2a & b, where a tangible risk actually exists.

#### Option 2d: Setback between new or replanted forestry to boundaries

A setback of 10 metres from boundaries would be consistent with the NES-PF which already requires the same setback. Given this, any provisions requiring the same would be duplication and possibly create confusion with other recommended setback options.

#### Effectiveness in Addressing Issue:

This option would not be effective as guidance states that at least a 30 metre setback is required for a defensible space to be created. Furthermore, a provision such as this would create confusion and inconsistency in the plan.

#### Risks:

As per the above statement.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

Provisions would be a duplication with NES-PF guidance, and could cause confusion to forestry operators.

#### **Recommendation:**

This option is not recommended.

#### Option 2e: Setback between new dwellings (buildings) and any road boundary

It is common within the Selwyn District to have shelter belts/ amenity plantings located along the road frontage. Unfortunately these plantings usually consist of highly flammable plant species, and quite often are ignited through various reasons. This option considers if it is appropriate to also place a setback from the building to road boundaries, and should this rule only apply where boundaries have shelter belts/ amenity plantings.

#### Effectiveness in Addressing Issue:

This option would only be as effective as those preceding it in that it only allows for defensible space to be created, not requires it.

#### Risks:

As above.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

This option would restrict the ability of the landowner to develop their land.

#### **Recommendation:**

This option is not recommended as these shelter belts/ amenity plants tend to be located on the same property as the dwelling/building in question, and given this any adverse effect arising from an increase in wild fire risk would be the property owner and should be disregarded. If the amenity planting/ shelter belt is located on the road reserve then the development would trigger option 2a.

# Option 2f: Provisions restricting the placement of amenity plantings and shelter belts within 30 metres of existing buildings (dwellings)

This option addresses the potential for a reciprocal setback to that suggested in Option 2e. This setback would apply to any new shelter belt or amenity plantings. Any setback distance considered under a provision such as this should be consistent with the other setbacks distances. This option does have another part, in that it would restrict the placement of vegetation near another person's building so as to not increase the wild fire risk on them.

#### Effectiveness in Addressing Issue:

This allows for defensible space to occur, but does not require it. This option will see the restriction on the ability for landowners to plant near neighbouring buildings which would then increase the fire risk.

#### Risks:

As per above, this option does not require defensible space. Additionally there is an element of uncertainty as to what type of vegetation should be included in the provisions.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions. This option would also require further investigation as to what type of vegetation should be included in the provision as per Option 2a.

#### Stakeholder and Community Interests:

This options restricts the ability of a landowner to plant on their property.

#### **Recommendation:**

This option is partially recommended. The part that is not recommended is the restriction on the placement of vegetation on a person's own property in relation to their own buildings, and the part that is recommended is the restriction of the placement of vegetation in relation to neighbouring dwellings/buildings. However, a rule dealing with this issue would be difficult to enforce. Further guidance as to what would be covered under such a rule would need to be developed.

#### Option 2g: Restricting the placement of buildings

This option would see the introduction of provisions that would restrict or prohibit the construction of buildings within areas deemed to be at significant risk to fire either due to geographical or vegetation reasons.

#### Effectiveness in Addressing Issue:

This option would not be effective as the whole Selwyn District has a fire risk, and particularly around 'lifestyle blocks' located on the Plains. Development cannot reasonably be restricted across the whole District.

#### Risks:

There is risk of backlash from the public if the Council were to declare a particular area as having a lower fire risk, then for a fire to occur within that area causing damage and/or loss of life.

#### **Budget or Time Implications:**

This option will require significant cost and time to map and identify areas.

#### Stakeholder and Community Interests:

The mapping of particular areas as high fire risk zones would have an effect on property values and future development potential.

#### **Recommendation:**

This option is not recommended as it would require an overlay to be created, which comes with its own difficulties in identifying appropriate sites, and then justifying why the subject land could not be built on or that certain restrictions pertaining to managing wild fire risk apply. Such an overlay would be time consuming, expensive, and contentious. Furthermore, guidance from FENZ has stated that the entire Plains area is an area of particular fire risk, and an overlay covering the entire district would not achieve the intended outcome.

#### Option 2h: Additional matters of control and discretion for activities requiring consent.

This option would see the inclusion of additional matters of control and discretion for land use consents relating to the consideration of wild fire risk. In essence this would allow a Consents Planner when assessing a land use consent for a building to assess the fire risk by examining the layout of the landscaping and the plants used. Presently, there is no ability to make this assessment. However, this option would only capture activities which have triggered consent requirement

#### Effectiveness in Addressing Issue:

Previously resource consent conditions have resulted in situations where the restrictions placed on the development has increase the fire risk to the property. This option would enable a Planner to consider wild fire risk as part of their assessment which will allow them to either avoid increasing the risk through inappropriate conditions, or by seeking amendments to the development to lower the risk.

#### Risks:

A risk that exists is that once a wild fire risk assessment has been made, a determination will need to be made as to what degree of detail and restriction should be included in consent conditions.

Essentially, does the Council just want to be able to make sure landscape plantings are positioned in an appropriate location, and uses plants with low flammability, or to require a land owner to adhere to the FENZ guidance on defensible spaces.

This option could see another layer of complexity added when assessing a resource consent application which may have time and cost implications for the applicant.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

This option would see the Council take a more active role in managing wild fire risk at the resource consent stage which could see more information being required in the application, or potential amendments.

#### **Recommendation:**

It is recommended that the matters of control and discretion are extended to include the ability to consider wild fire risk, so the proposed location and type of landscape plantings can be assessed. It is not recommended to extend powers to require a land owner to create a defensible space around their property. This option will give Consent Planners more ability to make appropriate assessments in regard to managing wild fire risk.

#### Option 2i: Provisions controlling the use of certain plants

This option would see the inclusion of provisions within the district plan restricting the use of certain plants in particular locations around a property, and would only allow fire resistant species to be used.

#### Effectiveness in Addressing Issue:

This option would be effective in addressing the fire risk for new development and from new vegetation, however it would be too unwieldy to enforce this across the district.

#### Risks:

Fire risk would still exist from existing situations, and from the inability to monitor district wide new development.

#### **Budget or Time Implications:**

This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

This option would affect all land owners seeking to plant new vegetation.

#### **Recommendation:**

This option is not recommended as it could be seen as too draconian and impinging on the rights of the land owner. The amount of resources required to ensure compliance would be unreasonable. Furthermore, this aspect is more appropriately dealt with as a matter of control and discretion rather than as a rule provision on its own.

#### Option 2j: High Fire Risk Overlay (for information purposes only)

This option would see the inclusion of a high fire risk overlay within the District Plan and would serve as an information guide for landowners only. This overlay will be based on the data provided by FENZ.

#### Effectiveness in Addressing Issue:

This option would not be effective in directing development, as no rules or policy would directly relate and give it power. The overlay would primarily be for the sake of providing information, and therefore the District Plan may not be the most appropriate place for it.

#### Risks:

As per Option 2g, fire risk exists across the district, and an overlay may result in a false sense of security for some landowners falling outside of the 'high risk' area. This may adversely influence the behaviour of some landowners who may not then take the appropriate defensible space actions.

#### **Budget or Time Implications:**

Whilst this overlay is being prepared by FENZ some cost may be involved in refining it for the District Plan. This option will require the drafting, consultation, and testing of provisions.

#### Stakeholder and Community Interests:

This option would affect all land owners within the District, with some taking an exception to being located within a 'high risk' area and the effect that it may have on their land value.

#### **Recommendation:**

This option is not recommended as an overlay would only be for information purposes and would not directly manage wild fire risk.

## 8.0 Conclusion

The scope of this work is to identify methods available for reducing wild fire risk to people and property, and consider the appropriateness of including these in the Proposed District Plan. Consideration of whether the methods are likely to conflict with the amenity and/or landscape mitigation methods in the Proposed District Plan and how this conflict can be managed is also required.

When considering what constitutes an appropriate control, an assessment that balances between providing adequate measures while not being unduly onerous needs to be made. For instance, the requirement to create 30 metre defensible spaces around all dwellings may adequately address the wild fire risk, but could be seen as over regulation by the Council. A more measured approach may be appropriate where the Council controls the location and types of landscape amenity plantings that are required as part of the consent, while giving the land owner the freedom to clear the rest of the land for a defensible space rather than require it.

# 9.0 Preferred Option for further engagement

In summary the recommended options for further development are:

- Option 2A: All new principal buildings should be setback from existing vegetation stands.
- Option 2B: New or replanted plantation forestry should be setback from existing principal buildings and non-rural zones.
- Option 2F: Restrict the placement of vegetation near neighbouring principal buildings.

  Option 2H: Include in the matters of control and discretion the ability for the Consent Planner to assess the wild fire risk of amenity and landscape plantings.

This option also includes:

- Revision of the policies and existing rules for the sake of clarification and coverage.
- Further investigation as to what types of vegetation should be included

Furthermore, the preferred options which include building separations, 'buildings' shall only include dwellings, commercial buildings, and sensitive activities. Accessory or utility structures should be excluded.

# Appendix A: NH004 Wild Fire Risk Baseline Report