



SEPTEMBER 2020

Bushfire Recovery Community Newsletter

COVID-19 update

COVID19 Information

For information on current community and business/industry restrictions across Victoria, and on the Coronavirus (COVID-19) roadmap to reopening, visit

 vic.gov.au/roadmap

For information on topics including staying healthy and COVID-19 testing locations visit the Department of Health and Human Services (DHHS) website at

 dhhs.vic.gov.au/coronavirus

For information on changes to Council services and facilities during COVID-19 visit

 cardinia.vic.gov.au/coronavirus

Support for community members and businesses

A range of new support measures are on offer to help the Cardinia Shire community cope with the impacts of COVID-19.

Initiatives include extension of the interest-free period for unpaid rates, continuing hardship provisions and payment plan options for 2020-21 rates, and rebates for health care card holders and/or people receiving JobSeeker payments.

There is also support for community groups, sporting groups and local businesses.

For more information on support available via the Community and Business Support Package call 1300 787 624 or visit

 cardinia.vic.gov.au/coronavirus

If you're feeling lonely or need support

Are you feeling isolated due to the COVID-19 pandemic? Support is available through the Community Activation and Social Isolation (CASI) initiative.

Examples of support that can be provided to you through this program include:

- wellbeing check-ins
- linking you with online social and community activities
- collecting items from the shops or pharmacy
- help with online applications
- running errands
- assistance with using technology (for example, video chatting) to stay connected with family and friends.

To request support, call the COVID-19 hotline on 1800 675 398 and choose option 3 OR call 1300 787 624.

For more information visit

 dhhs.vic.gov.au/coronavirus

Free face masks and in-home COVID-19 testing for vulnerable residents

Vulnerable community members can access free face masks via a number of local pharmacies and stores across Cardinia Shire.

For DHHS eligibility criteria and collection points visit

 dhhs.vic.gov.au/coronavirus

Alternatively, if you meet the requirements you can email recovery@cardinia.vic.gov.au

to request a mask. Please include your name and postal address.

COVID-19 testing at home is also available to vulnerable community members. For more information visit

 dhhs.vic.gov.au/getting-tested



COVID-19 update

New business online portal


'Cardinia Business' is a new, interactive online portal to support local business in Cardinia Shire, and for the Cardinia Shire community to show their support for local businesses.

The portal's 'Buy Local' map helps people find local businesses that are still operating during the pandemic, or getting ready to do so.

For local businesses: it's easy to put your business on the map, and because your listing is linked to your business' Facebook page, it updates automatically.

For residents: give a shout out to your favourite local businesses by posting a recommendation or photo.

It also has information on support available to businesses and links to essential business information, all in the one place.

 [cardinia.vic.gov.au/
cardiniabusiness](https://cardinia.vic.gov.au/cardiniabusiness)

COVID-19 online help hub

The COVID-19 online help hub has information, resources and links on topics including:

- support available for individuals, households and businesses
- COVID-19 health information
- family violence support
- looking after your mental health.

If you're having trouble finding or understanding the information in the help hub, please fill in the hub's online form and a Council officer will call you back, or call 1300 787 624 to request assistance.

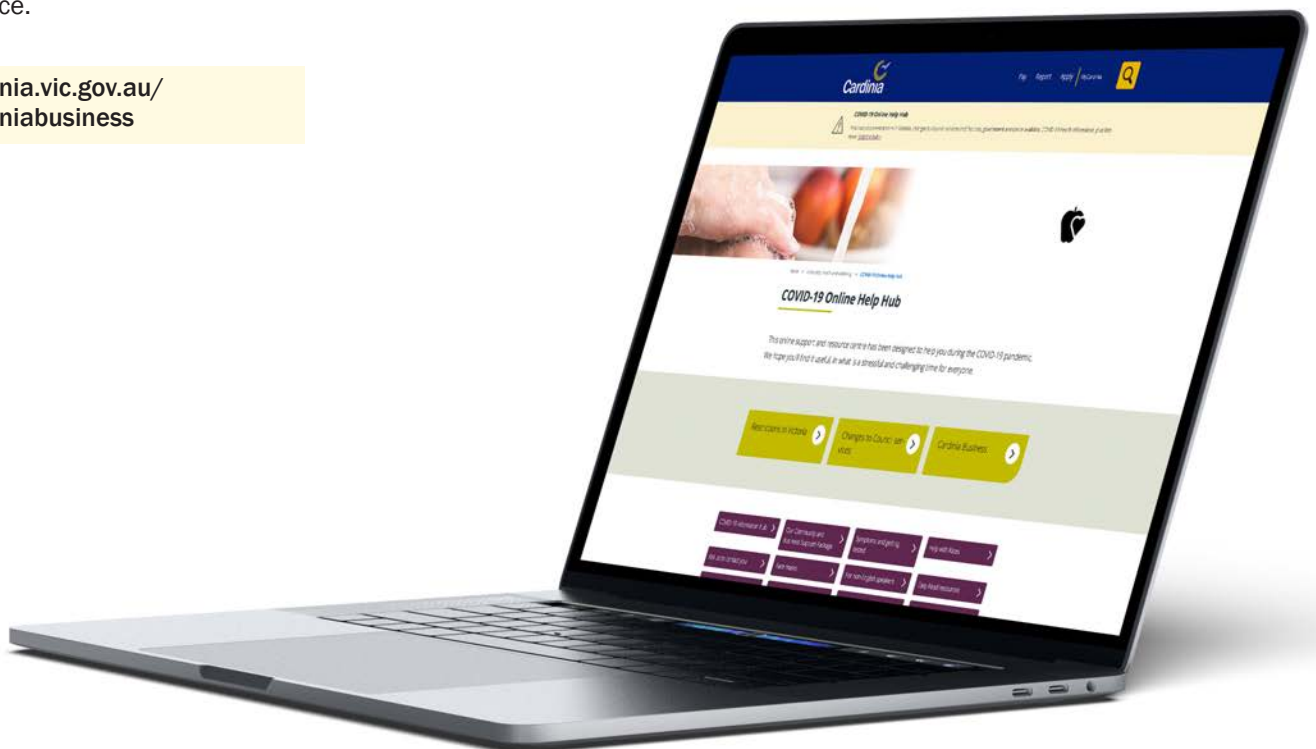
 cardinia.vic.gov.au/coronavirus

Recovery centre closed for now...

Unfortunately, our Bushfire Recovery Centre remains closed due to COVID-19.

In the meantime, we encourage the community to use the Bushfire Recovery Group - Tonimbuk Hall Facebook community page to connect and share.

To find the group, search for the name Bushfire Recovery Group - Tonimbuk Hall on Facebook and request to join.



Health and wellbeing | COVID-19



Staying physically healthy

During COVID-19 restrictions we must keep active while ensuring basic hygiene and social distancing.

Here are some tips to keep healthy during COVID-19 restrictions:

- keep eating a balanced diet
- get regular exercise and sleep
- reduce your alcohol intake
- if you're a smoker, think about and try quitting. Phone the Quitline on 13 7848.

Many in the community have started to walk more frequently to get out of the house and enjoy the longer days.

If you have been out and about during a walk and have taken any images or photos of the landscape/area we would love to see them.

Recovery Communications Officer -
T.briggs@cardinia.vic.gov.au

Staying positive

While it might feel like we don't have control of current events, it's important to remember that we can do many things to feel empowered and positive.

We encourage the community to interact and show us how you are remaining positive in these uncertain times. Post in the Bushfire Recovery Group - Tonimbuk Hall Facebook community page or send us an email about what projects you have been working on or how many COVID-19 hobbies you have started.

Connecting to your community has never been so important and the Recovery Team would love to share them in the next newsletter.

Recovery officers – 5629 8571
or recovery@cardinia.vic.gov.au

Staying busy

Casey Cardinia Libraries (CCL) remains temporarily closed but thankfully a free home delivery service is available.

All residents (who are CCL members) are able to access the free home delivery service which allows 10 items to be borrowed at the one item.

There are two options for borrowers, they can either choose their own items or they can ask for a 'Binge Bag' and library staff will pick a collection of items on their behalf, based on their interests.

CCL also contactless click and collect options available.

For more information about CCL services phone 1800 577 548

or visit



Staying mentally healthy

The recovery process following a major disaster is meant to be a time for healing in the community while also becoming closer and stronger. COVID-19 has caught us all by surprise and has changed the way we live, work and operate.

This impact cannot be understated and many may feel anxious, stressed or uncertain about the future.

The recovery team would like to remind the community that they are not alone. Resources are available for those who might need a chat or need to take care of their mental health and wellbeing.

Please check out the last page of this newsletter for these resources.

Even though our community is socially distant it doesn't mean we can't communicate and connect with one another.

We encourage everyone stay connected with the following ways:

- video chats
- phone calls
- online groups
- chats with neighbours while keeping 1.5 metres apart

Free psychology sessions extended until end of year

This is a great opportunity available to those in fire-affected area.

Katerina from Monash Health is available for appointments via phone or online and once restrictions allow, Katerina will be able to meet in person again.

To make a booking or just enquire about the service, please phone 0417 055 638

How can we connect?

These can be lonely times. Now more than ever we need connection with each other, and with the services that can assist us.

How can the Recovery Team help you achieve this?

- do you need some help getting online?
- do you have an idea you want to get off the ground but don't know how? Get in contact

We encourage you to get on the local Facebook sites to keep in the loop of the 'goings-on' around you.

If keeping connected to the Recovery Team, and being kept up to date with your communities recovery interests you then please:

- join the Facebook group: Bushfire Recovery Group – Tonimbuk Hall
- join our email list and or text list by emailing recovery@cardinia.vic.gov.au
- or if you prefer post then write to us at

Cardinia Shire Council
PO BOX 7 Pakenham 3810
and ask us add you to our postal list for important information.



Latest News

Weed control grants

The 2020-21 Weed Control Grants are now open.

Weed control grants are available to help landowners and community groups control noxious and environmental weeds on private property, both in agricultural areas and areas of high environmental value.

Funding is available for the following categories of approved weed control works:

- purchasing herbicide (maximum \$250, or \$500 for community groups)
- disposing of weed material, i.e. tip passes or skip hire (maximum \$200)
- hiring of equipment, for example sprayers, mulchers etc (maximum \$250)
- hiring contractors (maximum \$250)

Receipts that are submitted for reimbursement must be dated in this current financial year.

If your receipts do not meet the criteria no refund will be given.


You will be notified by email of the outcome within two weeks of submitting your application.


Receipts and progress report/payment request forms must be submitted via Smarty Grants in order to be reimbursed by Council.

We will do a random audit of properties to ensure compliance with the requirements of the grant program.

Please note eligibility criteria does apply.

For more information about how to apply and the criteria visit the Cardinia Shire website.

 cardinia.vic.gov.au/weedgrants

 cardinia.vic.gov.au/weeds

Tips for removing weeds

- where possible, choose non-chemical methods of weed control
- if the weed spreads by seed, consider the most appropriate way to remove the weed without spreading seeds
- think about how you will dispose of the weeds. Never dump your garden waste on roadsides or reserves as this can cause weed spread and invasion.
- make sure you have the right tools and safety equipment.

More information about removing weeds and a weed management calendar can be found on Cardinia Shire website.



Weed management calendar

Latest News

Council elections

Victorian local government elections will be held on Saturday 24 October.

Council elections are held by postal vote only and when you enrol for state and federal elections, you are automatically enrolled on the Council roll for the municipality in which you live, as this is your main place of residence.

During this time Council must comply with special arrangement in the lead up to the elections, this time is called 'caretaker period' in which is accordance with the Local Government Act.

The purpose of 'caretaker period' is to ensure that Council actions do not interfere with the election process.

This election the Cardinia Shire Council will move to a nine single councillors ward system following a ward boundary review in 2020.

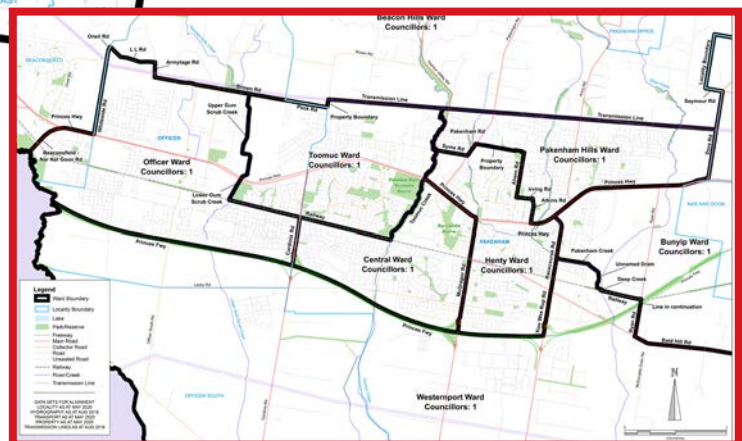
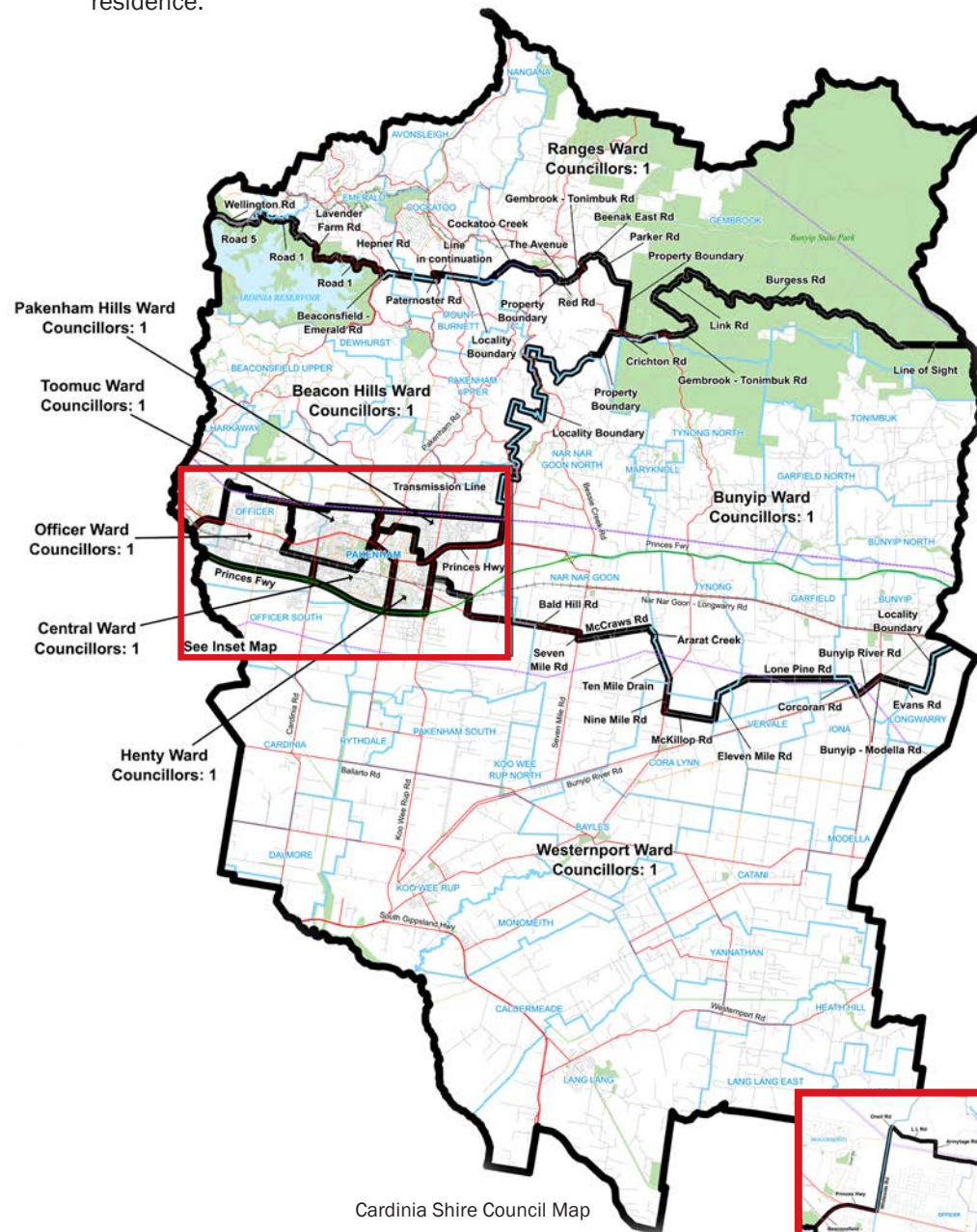
The new ward boundary will take effect in October 2020.

In Victoria voting is compulsory and you may be fined if you do not vote.

For more information about enrolling to vote, how to vote or information for candidates visit:

cardinia.vic.gov.au/election2020

vec.vic.gov.au/voting



Latest News

One-on-one on-farm consultations

Agriculture recovery services are available from Agriculture Victoria including on-farm one-on-one consultations by appointment and information resources on a range of post-fire agricultural recovery issues.

To register your interest in a one-on-one on-farm consultation, please download and send us the following form or complete it online.

Completed forms can be sent to your case manager, emailed to lindsay.hyde@agriculture.vic.gov.au or posted to:

Lindsay Hyde
Agriculture Victoria
4 Archer Drive
Mornington 3931

Agriculture Victoria podcast series

Agriculture Victoria has launched a pilot podcast series aimed to deliver knowledge and information bushfire recovery, drought and dry seasonal conditions, weather and climate, as well as some fantastic inspiring stories from young farmers.

You can subscribe and listen to AgVic Talk wherever you get your podcasts



Firewood collection 2020

The spring firewood season has now begun (Tuesday 1 September) and will run until Monday 30 November 2020. Firewood cannot be collected outside firewood seasons as to minimise risks to people, the environment and infrastructure during winter and periods of highest fire hazard

While collecting firewood during COVID-19 restrictions is allowed, you must follow social distancing requirements of 1.5 metres from another person.

For more information regarding the firewood collection period and firewood collection rules please visit:



ffm.vic.gov.au/firewood

Rates

The original rate interest exemption period ran from Friday 1 March 2019 to Tuesday 30 June 2020, however this period has been extended.

This extension will be extended to Wednesday 30 June 2021 at this point.

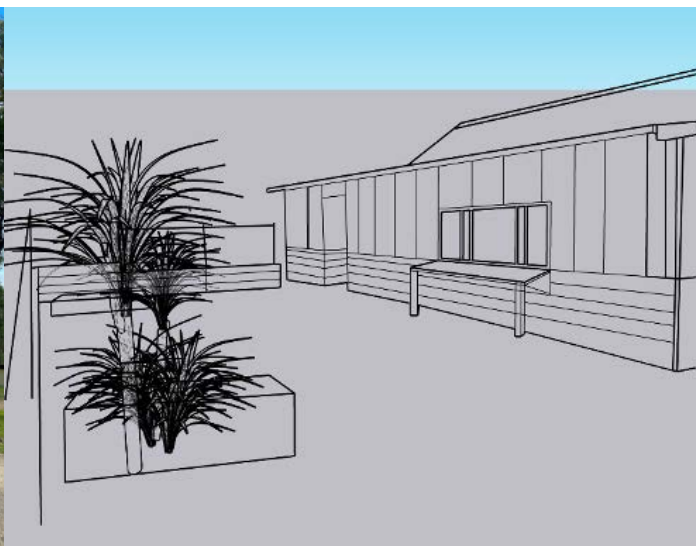
If any residents are experiencing financial hardship, we encourage them to call Council or go online and complete the financial hardship application

1300 787 624



cardinia.vic.gov.au/rates





Tonimbuk Hall - a new beginning

From the project sub-committee

- **Jane Edgley**
- **Jenny Clarke**
- **Sue McMahon**

Since the dreadful bushfire event that so significantly damaged our environment in March last year, the Tonimbuk Hall has operated as a much-needed Recovery Centre, hosting numerous community dinners, workshops and community events.

Out of this new role a stronger sense of connectedness and belonging has developed and, as a consequence, from extensive community feedback we have managed to identify areas of need and source some funding to deliver a refurbished, more functional kitchen.

This project also includes re-location of the hall entrance to an original entry point at the east end of the hall with the installation of a portico and ramp for disability access.

These works have commenced with the removal of the old kitchen and internal walls and the purchase of a new stainless-steel kitchen and appliances.

We have engaged a building surveyor, a drafts person and a variety of local tradespeople to implement the changes and we are very grateful for their generosity and assistance. Council works which have facilitated the removal of the asbestos and repainting of the hall, will conclude very soon, after which our project can move forward to completion.

We are very excited about these and many other planned improvements to our shared space which hopefully will allow us to further meet the needs of the community well into the future.



Creative recovery project update

Reflections (from the artists)

The land shapes the people shape the land. As the central beacon of the bushfire area stands Mount Cannibal. It is the familiar flat rocky-top mount, such a familiar shape to locals who recognise this landmark and consider it a 'welcome to' or 'farewell from' Gippsland.

This area north of the highway is underscored by the Tynong Batholith, the huge body of granite that lies mostly concealed beneath the earth across more than a hundred kilometres but breaks through repeatedly with huge odd-shaped rounded boulders that punctuate the landscape. It is a known hotspot of biodiversity among conservationists who have studied various species of flora and fauna over decades.

Cannibal Creek could possibly be considered the common and uniting element across all of the fire affected areas. It doesn't quite flow through Tonimbuk but it certainly travels the distance from Tynong North down through to Garfield North then across Bunyip North where it flows into the Bunyip River.

The shared experience of the bushfires has enhanced a sense of community for many people in an area where properties are spread out across the landscape. Each area has its own individual character that is both formed by the landscape and the people who live there. The overwhelming response of the people we engaged is that they would not want to live anywhere else – they love where they live.

The community have expressed that their connection with the land as being one of the most important relationships they have, they want to care for the land, this relationship is both practical and spiritual. From this relationship they draw strength and solace – it is aiding their recovery.



The next steps...

- artists are providing their estimated costings and timelines for their proposals, this week.
- council will review and advise which elements of these proposals can be supported by council.
- community will then be advised on the details of these projects.
- artists, Project officer and CRN will work together to source funding for projects.

Creative recovery project update

Main issues / things of importance in the communities:

- the natural environment: the hope, pleasure and meaning it gives to the spirit; its relationship to history, Aboriginal history and spirituality
- desire for opportunities to bring people together
- community identity is of strength, connection to neighbours, working together; people define themselves as resilient, practical, independent
- rebuilding, fencing, replanting trees, replacing livestock
- desire to enjoy the surrounding peace and beauty of their neighbourhood including the reopening of the Bunyip State Park and other walking and riding trails.
- desire for retaining and improving the meeting place of the Tonimbuk Hall, as the meeting place of Jinks Creek Winery was lost. "...to recover our hall to make it user friendly and continue our community events there and expand them"
- desire to increase possibilities of greater use of their community spaces: a need for common areas to meet, pause and reflect- a meeting place formal or informal.
- Garfield North, the overuse of facilities, dumping of rubbish
- narrow roads with little verge parking
- overcrowding on Mt Cannibal due to COVID restrictions
- community interests include nature and conservation, sounds, music, visual arts, walking, climbing, exploring, horse-riding and just getting together
- the importance of the tranquillity of where they live, often on no-through roads



Creative recovery project update

Imaginary vision - Meeting Place of Reflection



The resultant creative projects need to:

- create a sense of surprise for the community; unknowing and discovery
- provide an enriched aesthetic experience; it has to be beautiful
- foster a sense of belonging to a shared experience
- be something that has no precedence in the area
- demonstrate the deep consideration given to the planning and development of the project
- be poetic and compelling
- be respectful of nature
- bring people together actually or symbolically
- have functionality
- create a place to meet and gather
- reflect the identity of the people/ area
- leave a legacy

This area is all I know, it is my birthplace and is in my soul.

I've seen many changes which only strengthens the strong links I have with this beautiful country.

Never want to leave.

Creative Recovery Postcard Project
What do you love about where you live?



I love the green,
I love the green on
black, I love the leaves,
the huge skies, the
ranges behind.

I can see the clouds ,
the stars, and bush,
all from around where
I live.

That's why I love it.

Creative Recovery Postcard Project
What do you love about where you live?



Horse property management - recovery after bushfire

**By Dr. Mariette van den Berg
(MB Equine Services & Equine
Permaculture)**

Article adapted from the original publication in the Horses & People Magazine

Australia is no stranger when it comes to extreme weather events - bushfire, flooding, rains and skin-peeling heat are central to its history and traditions. Extreme drought and bushfires have recently affected many landholders, including our equestrian community, in different ways from those whose homes are damaged or destroyed to those who lost property, animals, crops, water supplies, soils or pastures. Many landowners around the country are mustering the strength to pick up the pieces and embrace the extended recovery, rehabilitation and rebuilding phase.

Acknowledging that climate change and extreme weather events will not disappear any time soon and the notion that these may even become more frequent have led to an increased need in our community to make our horse properties and equestrian operations more resilient. If you have dealt with past fires and drought or have just recently experienced hardship, many horse owners question how do we recover from this and how can we set things in place that make properties more fire/drought proof and resilient to flash flooding?

In this equine series we will focus on some of most common land and horse issues post-drought/fire and how regenerative pasture and land management strategies can assist you with the rehabilitation of your land, soils and pastures.

The challenges

Extreme climate events such as drought, fires and floods typically result in the following major issues for horse and landowners:

- pressures on grass availability (no grass or very limited grass)
- removal of vegetation such as trees & shrubs (shade/shelter)
- increase in land/soil related problems (e.g. loss of topsoil, erosion, weeds, water logging, reduced soil fertility);
- increase in feed and land management costs and;
- increase in disease outbreaks or the horse welfare may be compromised (e.g. due to wet or heat conditions).

These aspects have a massive impact on our finances, with cases where some horse owners are forced to move/agist horses elsewhere, take a break from owning horses or even have to close their equine related businesses.

If you are in position to embrace the recovery process, it may be a daunting process to decide what to tackle first as many of these issues are interconnected!

It should be noted that with or without extreme weather conditions, horse owners are often faced with land and pasture related challenges. In one of my earlier survey studies (1) of 497 horse owners and 3028 horses, I identified that most horse owners (90%) observe one or more pasture related problems with weeds, overgrazing, water-logging and compaction as the most prevalent.

There was also a heavy reliance on supplementary feeding with 95% of the horses fed concentrates and 86% conserved forages. However only 41% of the horses were being exercised.

The heavy reliance of additional feeding may be a reflection of not enough pasture availability or could be industry driven. Clearly in the face of extreme weather conditions, an increase in pasture related problems and extra feed and fodder costs would be a major concern to most horse owners and highlights the need for more land management and drought proof strategies.

Impact of bush fires to soil

While the most noticeable damage from bushfire on a landscape may be the vegetation and buildings above ground, we need to keep in mind that the soil beneath our feet, our medium for life, has been impacted as well. All fires, regardless of intensity, change the structure and behaviour of soil, but, in many cases, the impacts are short-lived, and the surrounding ecosystems recovers rapidly. In fact, low temperature bushfires can be beneficial to the soil as they provide potassium, which is an important nutrient for plants (resulting in this green pick coming through). However, severe fires with high temperatures across areas of low soil moisture (caused by prolonged drought), like those seen during Black Saturday and more recent bushfires, have the potential to severely damage soil.

It's important to remember that soil is a living, breathing organism, and a fire can impact soil in so many different ways- soil microbes and fungi can be killed, nutrients lost, soil seed banks can be decimated, the moisture content of the soil is reduced, soil may be contaminated from burnt structures and fire-fighting practices and the stripping of vegetation often results in erosion and loss of precious topsoil.

Soil management and erosion control should be considered as one of your foremost focusses when it comes to rehabilitation after fire or prolonged drought, as a big rainfall will often result in flooding and heavy run-off issues.

Horse property management - recovery after bushfire

Managing erosion on horse properties

Regardless if you have dealt with fires or severe drought, erosion control and reducing run-off is important. Using regenerative farming and permaculture design strategies there are eight practical ways to prevent or manage erosion on horse properties ranging from limited input to more integrate mechanical and design solutions:

1. Understanding contours and shape of the land.

If you want to work with natural patterns and prevent erosion you must familiarise yourself with a contour map of your property. A contour map is illustrated with contour lines, which shows valleys and hills, and the steepness of slopes. The contour interval of a contour map is the difference in elevation between successive contour lines e.g. 5 metres, 10 metres etc. From these contours, a sense of the general terrain and slope can be determined. The steeper and longer the slope of a field, the higher the risk for erosion. Soil erosion by water increases as the slope length increases due to the greater accumulation of runoff. Consolidation of small fields into larger ones often results in longer slope lengths with increased erosion potential, due to increased velocity of water, which permits a greater degree of scouring (carrying capacity for sediment). Therefore it's essential that if you are dealing with a hilly property and/or lot of water run-off that you work as much as possible along contour lines and integrate methods such as keyline design (i.e. rip-ploughing processes for in-ground water storage/flow-through and increasing soil health and vitality), swale design and on contour vegetation planting/mulching and fencing to prevent erosion.

2. Contour ploughing and keyline planning (ploughing)

Contour ploughing or contour farming is the farming practice of ploughing and/or planting across a slope following its elevation contour lines. These contour lines create a water break which reduces the formation of rills and gullies during times of heavy water run-off; which is a major cause of top soil loss and soil erosion. The water break also allows more time for the water to settle into the soil.

In contour ploughing, the ruts made by the plough run perpendicular rather than parallel to slopes, generally resulting in furrows that curve around the land and are level. This method is also known for preventing tillage erosion. Tillage erosion is the soil movement and erosion caused by tilling a given plot of land. A similar practice is contour bunding where stones are placed around the contours of slopes. Soil erosion prevention practices such as this can drastically decrease negative effects associated with soil erosion such as reduced crop productivity, worsened water quality, lower effective reservoir water levels, flooding, and habitat destruction. Contour farming is considered an active form of sustainable agriculture.

Keyline planning/ploughing works slightly differently from contour ploughing. The Keyline design and plough concept was originally developed by P.A. Yeomans in the 1950s to address issues of dwindling water supplies and soil erosion on Australian rangeland. Yeoman developed a system of 'amplified contour ripping' that maximises productive use of rainfall and facilitates the uniform irrigation of land.

The main idea behind Keyline design is to capture water at the highest possible elevation and comb it outward toward the (often drier) ridges using gravitational forces, reversing the natural concentration of water in valleys. The result of Keyline cultivation is an overall drift of surface run-off water, which prevents run-off concentration and the resultant gully erosion. It increases the time of contact between the rain and the earth and has the effect of turning storms into steady soaking rain. Rain may have become less frequent in some parts of Australia, but its intensity and volume over a twenty-four-hour period is growing.

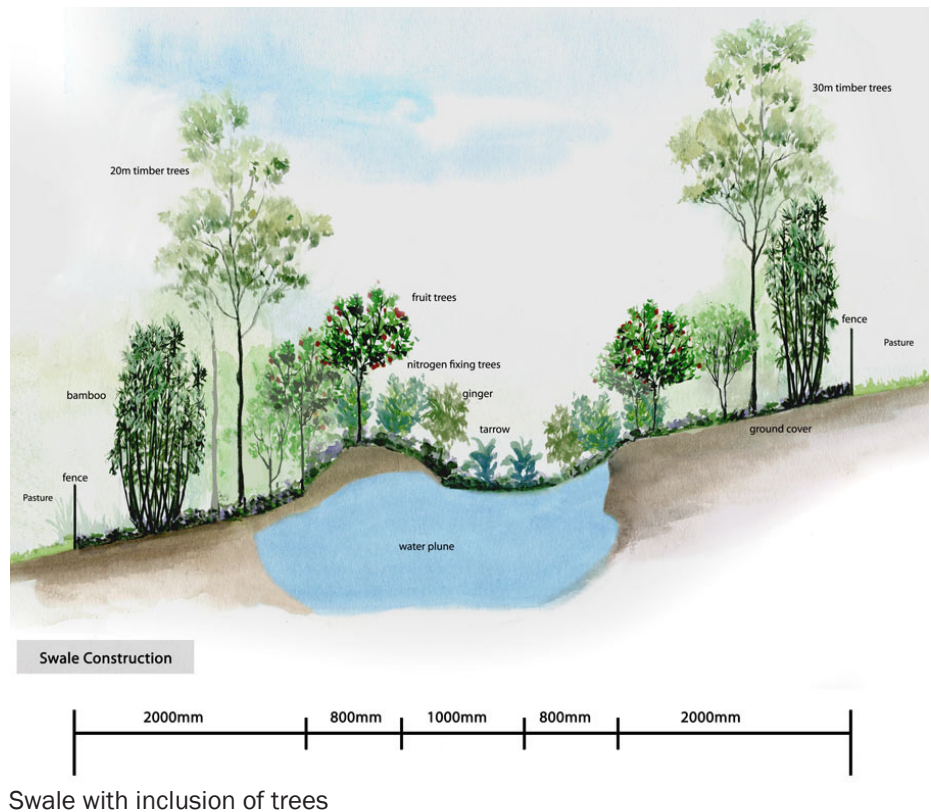


Keyline ploughing applied to a burned paddock

Horse property management - recovery after bushfire

3. Swales/contour banks

Water flows the fastest straight down a slope, and the effects of erosion will be most pronounced when water has the most direct path down a slope. Additionally, when water flows fast down a slope, very little of it is absorbed into the soil. By digging trenches on contours of the slope (swales), the flow of water can be slowed down, and diverted sideways on its downhill journey, to allow it to soak into the soil. Swales are not the same as contour banks. Contour banks actually redirect the water slightly off contour and drain to a central point to slow water and to stop erosion. Swales are level banks that follow contour from start to finish. Swales as used in permaculture are designed to slow and capture run-off by spreading it horizontally across the landscape (along an elevation contour line), facilitating run-off infiltration into the soil.



A swale is created by digging a ditch on contour and piling the dirt on the downhill side of the ditch to create a berm. The soil that is excavated from the ground is placed, uncompacted, on the lower side of the excavation in a rounded mound shape. Once the topsoil on the pasture is at 100% water-holding capacity, surface run-off flows into the swale. The water is absorbed and taken deep underground to recharge the subsoil and replenish underground springs. This process slows water in the landscape and retains it in the ground for longer periods of time.

4. On contour fencing

Likewise, when constructing paths, tracks, laneways (for example for paddock paradise set ups) and fences, it is best to have these run along the contours of the site, and not downhill, as downhill running paths will create significant soil erosion, because there are no ground cover plants protecting the soil on a cleared path. Fences holding horses will become tracks as horses walk the fence-line day after day, so we also avoid running these straight downhill if possible.

5. Vegetation/Planting

The simplest and most natural way to prevent erosion is through planting vegetation. Plants establish root systems, which stabilises soil and prevents soil erosion. If you have burned out pastures, any leftover root systems are important as it stabilises the soil. Therefore, tilling land directly after fire is not recommended as it will expose soils to the elements, unless you can directly stabilise it with a cover crop (permitting you have water availability). After a fire this may mean planting a fast-growing cover crop so you can start building soils for your preferred grass species. Creating healthy topsoil and good grass cover will act like a sponge, soaking up the water (and reducing direct and fast run-off).

You may want to consider other types of vegetation such as reeds, shrubs and trees as part of your recovery plan, as soil conditions and budget allows. Shrubs and trees will help control soil erosion and a forested steep slope also warms the cool night air to create a thermal belt.

When water runs downhill, it will carve its own watercourses and gullies, washing away the soil in the process. Trees, vegetation and ground covers absorb the flow of the water, and by creating a buffer between the flowing water and the soil, they control the problem of soil erosion.

6. Mulching (and slashing)

Many materials are used as mulches, which are used to retain soil moisture, regulate soil temperature, build soil, suppress weed growth, and for aesthetics. They can be applied to the soil surface to prevent soil erosion on slopes. When applied correctly mulches can dramatically improve soil productivity. Mulch layers are normally two inches or more deep when applied. A mulch is usually but not exclusively organic in nature. It may be permanent (e.g. plastic sheeting) or temporary (e.g. straw, bark chips). Mulches together with manure or compost improves the activity of worms and other organisms, which are important for building soil and increasing nutrient availability.

Horse property management - recovery after bushfire

Mulch can be applied at various times of the year depending on the purpose. Towards the beginning of the growing season mulches serve initially to warm the soil by helping it retain heat which is lost during the night. Because mulching is an effective ground cover immediately after being applied, it is an attractive choice for post-fire hillslope stabilisation. It is often used in conjunction with seeding to provide ground cover in critical areas and to increase the success of seeding by improving moisture retention.

On horse properties you could mulch your pastures by slashing long-standing weeds, old bunch grasses, or after growth of cover crop. This helps build soil, allows early seeding and transplanting of certain crops/grasses, and encourages faster growth. As the season progresses, mulch stabilises the soil temperature and moisture, and prevents the growing of weeds from seeds. In temperate climates the effect of mulch is dependent upon the time of year they are applied and when applied in fall and winter, are used to delay the growth of perennial plants in the spring or prevent growth in winter during warm spells, which limits freeze thaw damage.

7. Geotextile and geocells

While not considered a natural technique, some man-made tools can be very useful in combating erosion. Using geotextiles is an effective method because it also stabilises soil. When used in conjunction with growing vegetation, it is even more effective. Geotextiles are filter fabrics that are used to stabilise loose soil and increase stability from wind and water erosion. Made from synthetic and natural fibres, geotextiles help in the filtering, separation, and drainage of water from the soil.

Geotextiles can be woven, non-woven, or knitted. All these different fabric compositions are suitable and can be used in various applications.

Geotextiles are mainly used in civil engineering, agricultural and erosion control applications. It has been proven to stabilise locations such as roads, railroads, canals, construction sites, coastal engineering, and dams.

Another variant of the textile concept is the geocells/ matting, which is a three-dimensional mat or pavers made from polyethylene grids

The structure retains a layer of top soil and anchors the growing grass roots thus providing a stable surface highly resistant the forces of rain drops and run off. Other materials such as pea-rock and sand can also be used to fill the cells.

The cellular design allows for custom sizes, configuration and adaptability to a variety of terrains. The hydraulic properties are influenced by the type and compaction of the fill material. Geocells/matting has many applications; slope protection, horse sacrifice areas, tracks, roads, livestock/horses water points, ditches, ponds/dam walls etc.

On equestrian establishments geocell matting or pavers are commonly recommended for installation in any high wear area, which has a tendency to quickly “Bog Up” and erode away after even a little amount of rain.

For example around gateways and water points which are notorious for becoming a hazard in wet weather. Gateways are a high traffic area that are subject to wear and tear in all weather conditions, let alone when they become wet. This often can become a hazard to owners or horse handlers moving horses in and out pastures.

Eliminating standing water and mud ensures a clean and safe area for you and your animals. A mud-free environment is also of utmost importance for hoof health. Geocell matting or pavers helps to firm up muddy ground, protecting the health of your animals across a variety of applications, and let's face it, none of us, including our horses, like walking through mud!



Geocell matting retaining soil

Horse property management - recovery after bushfire

8. Retaining walls (and terracing)

Retaining walls can be built around the area of erosion to prevent water run off. Runoff water leads to further erosion, and if used with other methods (terracing), retaining walls can be a very effective way to prevent soil erosion. Retaining walls using straw/hay bales or Rock gabions can be very useful. Rock gabions are baskets made from flexible steel wire mesh and filled with granite or basalt rock. Rock gabions are constructed in various sizes and are commonly used for along creek banks, over soft ground, steep slopes and rock fall areas to trap sediment. The purpose of rock gabions is to prevent undercutting and/or scouring at the base of steep slopes. Vegetation may be incorporated into the gabion by placing cuttings into the gabion layers. The cuttings will take root in the gabions and the soil behind the structure. The vegetation provides additional stability once the root structure has developed.

Summary

Extreme drought and bushfire can increase the risk of flooding, even in areas that weren't directly impacted by the fire, or where flooding is unusual. In addition to the risk to life and property from severe flash-flooding, the resulting erosion removes significant amounts of soil from property and pollutes nearby water systems. The above-mentioned solutions can all be used (in combination) to prevent and manage soil erosion on your horse property, especially if you dealing with post-fire rehabilitation. The techniques and materials you want to use will largely depend on your landshape, land size and conditions, budget and your property design ideas.

Still the most important aspect of erosion control is the understanding of contours (and the effect of slope on water and animal traffic) and work with them to reduce damage to your land and reduce run-off.

For example if you are planning on (re)fencing areas for your horse's



Strawbale systems for erosion control post fire



pastures or planting trees/shrubs, use contours for placement. This small adaption won't cost you necessarily more (maybe you have to run couple of extra meters), but in the long run it will save you lots of damage control which always will involve extra labour and/or money for restoration!

While managing erosion and keeping top soil is a main focus post-fire management, as mentioned earlier often horse properties have pre-existing land issues as shown by the result of my survey. In the next newsletter we will focus on restoration

of damaged pastures and soils - specifically addressing compaction and weed related problems on horse properties.

Reference:

Mariette van den Berg, Wendy Y. Brown, Caroline Lee, Geoffrey N. Hinch (2015) Browse-related behaviors of pastured horses in Australia: A survey, *Journal of Veterinary Behavior*, Volume 10, Issue 1, Pages 48-53. <https://doi.org/10.1016/j.jveb.2014.11.001>.

Business renewal

Business and farm recovery and renewal services

Council's Economic Recovery Officer, Daryl Brooke, is available to help fire-affected businesses and farmers who are now being further impacted by COVID-19.

Contact Daryl by email at d.brooke@cardinia.vic.gov.au or by phone 0433 948 258.

Short-term assistance

- dealing with short-term cash flow or operational problems
- help pivoting your business to products and customers better suiting these times
- assessing new industry opportunities
- referrals to appropriate professional help
- ask to be included on our Friday's Business weekly email

Longer term assistance

- assessing new business ideas
- 2022 and beyond business plans
- evaluating new and better business models and methods
- ask about our work with your West Gippsland Progress Association on food, tourism and small business industries.

COVID-19 help for fire-impacted farms and businesses

• Australian Government support

Use this website for current commonwealth support options:

business.vic.gov.au/coronavirus-covid-19/business-support/Coronavirus-COVID-19-business-support-and-financial-assistance-finder

• Victorian Government support

Use this website for current state support options:

business.gov.au/Risk-management/Emergency-management/Coronavirus-information-and-support-for-business

Thriving in tough times

Weekly business workshops coming October and November

Details will be available soon for workshops throughout October and November.

• Building resilience - how to prepare for business challenges

A crisis is no time to expect to make sound business decisions. You won't have to if you already have in place a plan to activate when normal day-to-day business is interrupted.

- **Business planning essentials - how to build a road map to success**

Put your business on the path to long-term success at this essential workshop that will take you, step by step, through the vital process of building a business plan to drive your business forward.

- **Finance fundamentals - how to keep cash flowing**

Cash flow is the life blood of every small business. Not enough cash flow, and things start to go wrong. Without it, no business can survive.

- **Marketing your business -how to get it right, first time**

Marketing is a vital tool to establish your brand and build a loyal customer base. Without it, your customers will struggle to find you or even know what your business does.

- **Taking your business online - What you need to know**

Get yourself ready to launch your business online at this essential digital workshop that goes right back to basics to build a complete picture of the opportunities ahead.

- **Selling or succession planning? - how to exit successfully**

It takes just as much planning to exit your business as it did to get started. You owe it to yourself – and all your hard work – to make sure this last big decision is a success.

- **Starting your business - How to turn an idea into a business**

Come to grips with everything you need to know before you get started and walk away prepared with a clear vision of the next steps needed to turn your idea into business reality.



Support services

Monash Health: provide specialist counselling for individuals of any age and families, either 1:1 or as a family.

FREE for fire-affected community.

Call: 9796 1500

Windermere: case workers available at the recovery centre or email bushfirerecovery@windermere.org.au or phone 1300 946 337

There are a number of other organisations that offer free counselling and personal support. Many operate 24 hours/7 days a week:

Lifeline:	131 114, 24-hour telephone counselling, information and referral service
BeyondBlue:	1300 224 636 Information on depression and anxiety
Kids Help Line:	1800 551 800 Confidential phone counselling for young people aged 5–25 years.
Headspace:	1800 650 890
ParentLine:	132 289 Counselling and information for families with children up to 18 years old
Men's Line Australia:	1300 789 978, 24–hour counselling
Safe Steps Family Violence Support:	1800 015 188
Family Violence support:	Call 1800 RESPECT (1800 737 732 - confidential) or go to vic.gov.au/familyviolence