Ms Sonja Terpstra MP
Chair
Legislative Council Environment and Planning Committee
Inquiry into the 2022 Flood Event in Victoria
Parliament House, Spring Street
EAST MELBOURNE VIC 3002

Victorian Farmers Federation

5 June 2023

Dear Committee Chair,

**RE: Submission to the Inquiry into the 2022 Flood Event in Victoria**

The 2022 flood events had a profound impact on Victoria's agricultural sector and regional communities. The floods caused extensive damage to crops, livestock, machinery, and infrastructure. Many farmers suffered severe financial losses, impacting their livelihoods and long-term viability.

Over 15,600 livestock deaths were reported to Agriculture Victoria, 12,000km of fencing damaged and over 150,000 tones of hay and fodder damaged and destroyed. In total, nearly 500,000 hectares of farmland was impacted.

The VFF acknowledges the substantial financial losses, infrastructure damage, and emotional toll experienced by farmers and their families. We urge the inquiry to recognize the unique challenges faced by farmers and prioritize the needs of rural communities in its recommendations.

Communities must be acknowledged for the spirit in which they responded to the floods and the way in which community members worked to help each other, often without the direction or assistance of government.

The VFF commends the efforts of emergency services, local government authorities, and community organizations in responding to the floods and supporting affected communities. However, we believe that there is room for improvement in terms of coordination, communication, and allocation of resources. The inquiry should assess the effectiveness of the response efforts and identify strategies to enhance future emergency management practices.

VFF members have voiced frustration that recommendations from previous flood and storm events had not been implemented. They were concerned that when they looked for information or warnings the information was for urban areas only. They were frustrated that warnings of the consequences of failing to maintain public assets such as levees and roadside drains increased risk to life, property damage and isolation for rural communities.

It is imperative that the inquiry focuses on identifying and promoting effective flood mitigation and preparedness measures. This includes improved early warning systems, enhanced flood mapping and modeling capabilities, and the development of comprehensive floodplain management strategies. The

VFF emphasizes the importance of engaging with relevant stakeholders, including farmers, to ensure that mitigation measures are practical, sustainable, and context specific.

The floods exposed vulnerabilities in Victoria's infrastructure and land and water management systems. The VFF calls for a thorough examination of existing drainage infrastructure, levee systems, and water catchment management strategies to identify areas requiring upgrades, modifications or improved operating rules. This also includes the impacts on regional road maintenance and repair.

The VFF urges the inquiry to consider the immediate and long-term support needs of flood-affected farmers. Financial assistance, access to mental health services, and tailored support programs are essential to help farmers recover from the devastating impacts of the floods. The inquiry should examine the effectiveness of existing support mechanisms and recommend measures to enhance their accessibility and efficiency.

The VFF policy statement for Emergency Management (Natural Hazards) is enclosed for the Committee's reference and outlines what industry needs in order to minimize the impact of floods, fire and storms to their business and the Victorian economy. This policy is supported by actions that are needed to deliver the required objectives. These actions are informed by the learnings from each event.

Faithfully,

**Emma Germano**
President

**Flood modelling and mapping**

The adequacy of flood predictions and modelling has been reported as variable across the flood affected areas of Victoria. It is appreciated that in some areas water built up so rapidly that there was minimal time for information on the extent of possible inundation to be conveyed to the community.

Flood mapping and modelling is variable between communities and Catchment Management Authorities. Much mapping and modeling focusses on urban centers, rather than rural landscapes and communities. The VFF is concerned that where flood models are not predicting the true scale and nature of the event, managers fail to provide adequate information and predictions for rural areas.

**Early warning systems and community information**

Over the years there has been a reduction in flood gauges and many of those remaining have not been upgraded or kept in working order. There were several examples sighted where flood gauges were only operational at the edge of towns. Warnings and advice were given for towns but not for rural areas between towns. When farmers tried to access information, it was difficult to interpret and information at confluences with other waterways was not available.

In the lower Loddon, farmers highlighted the need for upgrades in the upper Loddon stream flow monitoring system to give better warning of what's happening in flood events. They suggested that knowledge should be available through an early warning app or digital platform. The community benefit of this would be significant as the history of flooding in the Loddon shows that what is predicted as a moderate flood can escalate to a major flood in a matter of hours. Particularly when that happens to be overnight then the impacts can be devastating to farmland and towns like Bridgewater.

Public meetings focused on the impact to urban centers, as opposed to the whole community and were of little benefit to farmers. In addition, rural communities expressed frustration with the operation of the

Emergency Victoria App which either provided too general information that was of no benefit, or only focused on urban centres. Information was not available when the floodwaters were not behaving as modelled, nor were warnings given to those communities about the likely peak and length of time at peak.

**Recommendations:**

- That government invest in a maintained network of gauges at locations that allow for preparation of advice to all landholders.
- Flood gauge information and local intelligence is inputted into flood models for warnings and advice.
- The development of an app that allows access to real time flood gauge data and advice on how to interpret the likely impact of that level and the likely peak (and timing).

in previous emergency system reviews, if agriculture is mentioned it is as a key land use in the area. The rest of the document will be silent on the key issues relevant to farming as these issues were not central to considerations of the reviewer.

Failure to consider impacts to agricultural land perpetuates a perception in emergency agencies and communities that there is no impact on farmers or agricultural land from floods, fires or storms. The natural extension of this is the removal of flood gauges or monitoring stations that serve agricultural areas. It seems to be little understanding of the need for accurate information for farming areas or why farmers need to know the extent, depth, or speed of floodwaters on their farm.

Victoria has added three new Cs to the traditional control, command, and coordination model. The new Cs are Consequences, Communication and Community Connection.

In the first major event since the change, responding agencies proved to have little understanding of agricultural systems. SES, CFA, FFMV, EMV are the key responders but none of these agencies have a core understanding of farming and agriculture. Attachment 2 is feedback received from members regarding the 2022 flood event.

***Consequences:*** *The management of the effect of emergencies on individuals, the community, infrastructure, and the environment.*
The consequences are not limited to urban areas. The community is not only in urban areas. Farm infrastructure is infrastructure and farmland are part of the environment and has intrinsic value as well as value supporting local jobs and food security. Local and regional plans must consider the type of agriculture in an area, what the potential consequences are and how they can be avoided through preparedness and response.

***Communication:*** *The engagement and provision of information across agencies and proactively with the community to prepare for, respond to and recover from emergencies.*
Our members tell us that they have been attempting to make emergency responders aware of risks – from blocked roadside drains to vegetation growing on levee banks. It is concerning that these agencies did not understand the significance or the risk. Failure to maintain assets causes breakouts of floodwaters that have consequences. They cut new channels, they flood different areas, they undermine roads and other infrastructure. That means you cannot prepare, your ability to respond is impacted and recovery is delayed or made impractical.

***Community Connection:*** *The understanding of and connecting with trusted networks, trusted leaders, and all communities to support resilience and decision making.*
Many of our members are well known and respected in the community. They are often who people turn to for information – what should they do, how should they prepare. They often have lived experience and are willing to share what they have learnt the hard way.

The VFF is concerned that Government has not enabled the Inspector General Emergency Management (IGEM) to give recommendations on minimising agricultural impacts in recent terms of reference. By excluding non-urban impacts in IGEM reports the responding agencies and departments have formed an opinion that there were no non-urban impacts and that there are no improvements to be made.

This leads to the failures to understand the consequences, communication, or community connection, and explains the failure of the planning minister to see the need to look at planning system improvements to the significant majority of flood impacted land.

**Recommendations:**

- By January 2024 all emergency management agencies need to demonstrate how they are including active consideration of Consequences, Communication and Community Connection in rural / agricultural areas. This should include processes to understand different impacts based on the nature of the production system / commodity.

- That the Government develop terms of reference for the IGEM to consider agricultural impacts from floods, fires and storms and provide recommendations to improve emergency preparedness, response, and recovery.

- That the issuing of sandbags be reviewed with a fair and equitable system put in place to ensure all community members have access, particularly those in rural areas. Consideration should be given to having pre-planned and coordinated storage and distribution centers.

**Assessments**

Rapid impact assessments provide the basis for understanding the scale and consequence of natural disasters. The VFF is concerned about the accuracy and timeliness of these assessments in the context of the agricultural sector and floods.

By 9 December 2022, Agriculture Victoria had made 28,000 outbound telephone calls to farmers to assess damage and address animal welfare concerns. The VFF believes Agriculture Victoria has improved its response to natural disasters and is pleased to see the impact surveys used by the department now focus on other impacts outside of immediate animal welfare concerns, including damage to crops, infrastructure and machinery. However, particularly in the case of floods, the impacts to a farm business may not be known until months after the event. For example, damage to crops may not show until later in the plants growing cycle, or animal health issues such as footrot or worms may or may not emerge long after the floodwater have receded. Rapid impact assessments miss these issues which means the impact of the natural disaster is not fully comprehended, resulting in inadequate support and assistance to farmers after the event.

In addition, consideration needs to be given to the way in which farmers are contacted and information is obtained. During and immediately after the event, farmers are isolated and difficult to contact. One issue raised by farmers was the fact that phone calls from Agriculture Victoria were coming from unidentified phone numbers, and therefore phone calls were unanswered.

**Recommendations:**

- That in combination with Rapid Impact Assessments, government undertakes longer-term monitoring and reporting of flood associated impacts on the agriculture sector.
- That recovery teams at council to hold rapid impact assessments for farm properties and follow ups every three months until recovery to pre flood level has been achieved.
- That EMV and Agriculture Victoria report on the total economic impact of a flood event on agriculture and what actions could be taken in future to minimise impacts on life and property.
- Agriculture Victoria calls to farmers are to be from a recognised number identified as Agriculture Victoria.

**Flood management Infrastructure**

In the early 1900s government constructed levies across flood prone areas to protect towns, community infrastructure and farmland. These levies were maintained and repaired by government, most notably following the 1975 and 1993 flood events. Over time, the maintenance of this infrastructure became overlooked by government and legislative change resulted in the government taking a beneficiary pays model. Many rural land owners were never made aware of this change .

It is important to note that levees provide broader community benefit beyond the protection of farms and private property. For example, levies protect road assets which keep communities connected during and after the event. The VFF believes that government has a duty to assist the maintenance of levee systems that government itself had originally constructed.

The VFF has received representations from farmers in the Goulburn Valley impacted by the operation of Loch Garry during the flood event. Situated at Bunbartha, the Loch Garry flood regulator is a 48 bay structure made up of 8" and 8.5" drop bars. It is operated to achieve the intent of the agreement (1925) between landholders and the State Rivers and Water Supply Commission (now GMW), to allow the same proportion out of the lake as flowed into the lake prior to the inception of the levees once the Goulburn River rose to 34ft on the new gauge at Shepparton. During the flood event, the failure to raise the bars in a timely manner resulted in levees breaching and flooding surrounding landowners. The VFF notes that the Loch Garry Flood Protection service review is currently being undertaken and welcome this review to ensure the operating rules for the structure are appropriate. However, consideration should be given to the automation of critical infrastructure such as Loch Garry to ensure timely and safe operations.

**Recommendations:**

- That the operating rules of irrigation and flood mitigation infrastructure be reviewed in order to find better ways to manage inundation and flow through districts.
- Government funds the automation of critical flood management infrastructure such as Loch Garry to ensure timely use in emergencies.
- The government ensure that levies are inspected regularly with maintenance carried out, including the removal of trees and root systems. Government should fund these works in recognition of the broader community benefit provided by this infrastructure.
- That governments review recovery grants to enable payments to farmers to repair private flood mitigation infrastructure soon after a flood event.

**Drainage and roads**

The floods caused widespread damage to road infrastructure across the effected regions. One of the key issues contributing to the vulnerability of road infrastructure and failed drainage systems is the chronic underfunding for their maintenance and repair. The limited financial resources allocated to rural and regional areas have hindered the necessary upkeep required to mitigate the risks associated with flooding events. Insufficient funding has led to a backlog of maintenance tasks, leaving roads and drainage systems vulnerable to the impacts of natural disasters.

The failure to maintain roadside drains not only increases the likelihood of damage to the road surface and resulting increased the cost of repairs, but leads to extended isolation for farmers and inability to access services in the aftermath of floods.

The farming community has expressed concern towards the maintenance of roadside drainage infrastructure, including through the infestation of vegetation which restricts the flow of water. Farmers are not empowered to assist in the maintenance of these drains, despite being willing and capable to do so.

If spoon drains are not in place and maintained clear of material and vegetation, and roads are graded to allow water for flow off the road into the drain then water pools in low spots making them unpassable for some vehicles and creates holes. If vehicles become bogged, they create large ruts that are dangerous and costly to repair. In a significant event the road that is meant to safe egress becomes a waterway and any defects can become large cuts into the road surface.

Councils feel they cannot maintain drains in safe condition. "*Staff cannot damage native vegetation without it being assessed by accredited specialists. Our staff are instructed not to do any work outside the road envelope. It is illegal to damage native vegetation and we need to ensure assessments, permits and offsets are in place prior to doing such work. Any removal of native vegetations is not done without the appropriate steps being taken. Grasses and shrubs have usually the highest native veg value. We are not qualified to assess or to prepare the reports to DELWP for approval*."

**Recommendations:**

- That farmers be empowered to undertake vegetation removal along drains to ensure ongoing maintenance and to improve road surface conditions.
- Urgent improvements be made to the operation of native vegetation regulations in Victoria to ensure public and community safety are included in decision guidance and exemptions from permits.
- Government commits to long-term funding security for regional road maintenance and repair to ensure infrastructure is resilient to future natural disasters.