



Communique

Meeting Held - Friday 18 March 2022

Status Report

The Committee noted the progress of several matters arising from the November meeting:

- **State Bushfire Coordination Committee Membership**

Welcome to a new member and two deputies appointed by Governor since the Committee last met:

- Mr Troy Fountain, Member for AGD-PLUS
- Ms Rhiannon Hardy, Deputy for AGD-PLUS
- Mr Luke Brooks, Deputy for SA Power Networks

A note of thanks to Mr Frank Crisci from SA Power Networks for his long and dedicated service to the SBCC. Frank has been a member of the SBCC since its inception in 2010.

- **Australian Fire Danger Rating System (AFDRS) Update**

Refer to the attached update on the AFDRS (which has been further updated since the SBCC meeting). To note:

- agreement on the national ratings system, which has a 'non-zero' start
- development of ignition, suppression and impact indices.

State Bushfire Management Plan Implementation Update

- **BMC Meeting Structure Implementation**

After some setbacks (including operational demands and COVID impacts) up until about mid-February 2022, the SACFS Bushfire Management Planning team have been working to get the new BMC meeting structure up and running. This has included meeting with BMC Executive Officers and briefing them on the autumn meeting format, incorporating a post season review component. A summary report of the outcomes of this review process will be brought to the next meeting of the SBCC. Work is also underway on preparation for the Annual Report, and the mid-year risk reduction workshop.

- **SBCC and BMC Governance Review**

Unfortunately the governance review has not been significantly advanced, due to resourcing issues within the SBCC Secretariat since the last SBCC meeting.

- **BMAP 2.0 – Software Redevelopment**

Significant work has been progressed on the project to develop a new Bushfire Management Planning and Reporting System. The project management framework is in place, with a Steering Committee composed of key data management agencies, supported by a Technical Working Group. A survey will be issued to seek feedback from end users on a new system, and this process will also be used to seek nominations for User Acceptance Testing of the new system. The significant high-level support provided



by the Department of the Premier and Cabinet (DPC) and DEW for this project was noted.

- **Branding and SBCC Website rollout**

There have been some technical issues associated with the operationalisation of the website, but it is hoped to have this in the public domain by the May SBCC meeting. Rollout of branding has commenced with the Bushfire Management Committees.

SBCC Annual Report 2021-2022

The committee noted that the annual report for 2021-2022 will need to incorporate reporting against the implementation of the State Bushfire Management Plan actions, as well as of activities in Bushfire Management Area Plans (BMAPs). Until an automated reporting system is in place, manual reporting on BMAP delivery will need to continue, using excel spreadsheets and re-processing of data collected.

In 2020-2021 around 30% of agencies responsible for delivering activities in BMAPs did not report. This year agencies who fail to submit a report will be named in the annual report. Agencies will also be encouraged to provide more detail on delivery of activities where possible, including metrics such as kilometres of track treated; area burnt, and the cost of works delivered. This information will be aggregated as far as possible and included in the Annual Report. This is in response to public and political demand for more detailed data on bushfire risk reduction activities to be centralised following the first annual report in 2020-2021.

Smoke Management Policy

The Committee has been discussing the progression of a smoke management policy for some time. Feedback received from member agencies after the November 2021 SBCC meeting, indicated a range of views regarding the appropriateness of the policy sitting with the SBCC. The key concern was that it had wider application than matters focused on coordination of bushfire risk reduction and readiness, which is the core function of the Committee. There is also a need for the industry sectors involved to take ownership of the guidelines supporting practical implementation of the policy, as a self-regulation approach.

PIRSA has taken the lead on engaging with industry sectors, notably wine grape growers and the broadacre cropping industry, on the development of an agreed approach to smoke management.

Following discussion, the SBCC resolved to hand back the publication of the smoke management policy to SACFS as rural fire hazard leader. However, the Committee also requested a periodic review of the status of the policy and its implementation to provide a level of oversight and assurance regarding its intent being met. SACFS will liaise with PIRSA to finalise industry guidelines referred to in the policy prior to its publication.



Agency Updates

- **Primary Industries and Regions SA (PIRSA)**

Dog Fence – Major BMAP Amendment

PIRSA advised the Committee that the Dog Fence Board is working with relevant BMC members and SACFS Regional staff to support review of the risk assessment and appropriate allocation of sustainable risk reduction activities along the length of the dog fence, which is a State strategic asset. In due course these proposals will be brought through the relevant BMCs for review and endorsement, before submission to SBCC for endorsement for public consultation as a major BMAP amendment.

- **Department of Infrastructure and Transport (DIT)**

Roadside Vegetation Management Review

DIT are progressing the development of mapping of bushfire risk along roadside corridors under their management, as a basis for works planning and management. This work is being undertaken in consultation with SACFS and SAPOL. Priority areas include: potential evacuation routes, roadsides adjacent to residential areas at very high and extreme bushfire risk, and identifying locations where transverse breaks in roadside vegetation could support bushfire suppression management.

This work is dependent to some extent on BMAP 2.0 landscape bushfire risk assessment data. DIT is also working with adjacent landholders and managers, including local government and pastoralists to progress the mapping. Once completed this information will be available to support emergency management.

- **Attorney-General's Department – Planning and Land Use Services (AGD-PLUS)**

Briefing on Statewide Bushfire Hazards Overlay Code Amendment

An overview and update on the code amendment process was provided to the Committee. Further information on the [Code Amendment](#) is available on the Plan SA website.

Bushfire Management Committee Nominations

The Committee approved several nominations for the current term of Bushfire Management Committees.

The next meeting of the Committee will be held on Friday 16 May 2022.

(Communique issued 22 April 2022)

AFDRS: Building a modern and consistent Fire Danger Rating System

The AFDRS at a glance:

- The current fire danger ratings systems are largely based on science that is more than 60 years old.
- National research has found the need for a simpler, community focussed fire danger rating system.
- Across Australia, states and territories have inconsistent terms and interpretations for fire danger ratings.
- The new AFDRS is based on a Fire Behaviour Index that will support agency and industry decision making processes seamlessly across all Australian landscapes.

The AFDRS will be implemented in September 2022, creating a consistent set of fire danger ratings across Australia.

The new Fire Danger Ratings:

Four ratings of Moderate, High, Extreme and Catastrophic have been agreed to, with the range of Fire Behaviour Index also locked in. The AFDRS will also introduce “off” or “no rating” for days where there is an FBI of 0-11, creating a more action-oriented set of ratings.

Name	Fire Behaviour Index Range
MODERATE	12-23
HIGH	24-49
EXTREME	50-99
CATASTROPHIC	100+

AFDRS: Ignition, Suppression and Impact Indices




While the AFDRS has been focused on improving the public facing Fire Danger Ratings, and the science that sits behind them, the program is also considering the other factors that influence fire management decision making.

The Fire Behaviour Index, which will replace the current FFDI and GFDI, has a step-up design for each fuel type that considers implications for fire spread, appropriate suppression responses and the level of impact – making it a highly valuable tool.

However, the establishment of ignition, suppression and impact indexes takes this much further by provided fine-tuned information to better inform a broad range of decisions.

A considerable amount of research and testing has gone into the development of these indices, and attention is now turning to the practical implementation of the ignition and suppression indexes in operational settings, with the impact index still undergoing refinement.

These additional indices will support agencies to be better prepared in the event of dangerous fire conditions and will help them better advise and protect communities.

AFDRS		Ignition Index Likelihood and ease of ignition from natural and human sources.
		Suppression Index Likelihood of initial attack suppression success.
		Impact Index Likelihood of impact on assets (houses and critical infrastructure).

National snapshot- February

The countdown to implementation-6 months to go!

With the name of each level and FBI range, as well as the non-zero start, agreed to at the Program Board meeting in December, work has commenced to finalise the design of the new system and the appropriate community messaging. A discussion paper was distributed with all jurisdictions providing them with the opportunity to provide valuable and constructive feedback to help inform a nationally consistent look and feel for the AFDRS. Based on this feedback, additional community research is being undertaken, ahead of the designs and calls to action being finalised.

The AFDRS Program Board endorsed the AFDRS Business as Usual governance and support arrangements for the initial operational phase of the AFDRS. These arrangements outline who will manage the AFDRS, maintain the infrastructure, keeping data flowing into the system and ensure the continual improvement of the science and relevance to the community into the future. The arrangements establish the AFAC AFDRS Committee, consisting of jurisdictional representatives and the Bureau of Meteorology to oversee the AFDRS governance, with support from NSW RFS for ongoing hosting and operational requirements.

Operational Trials

As the Southern Australia fire danger seasons start to wrap up, the operational trials are coming to an end. Apart from WA, there has been below average fire activity across the country, making it complicated for local teams to get a real time side-by-side comparison between the current and new system. Based on the feedback from jurisdictions, the Operational Build team is fixing some of the bugs that have been picked up during the Northern and Southern operational trials.

Nationally consistent training assets

A suite of training assets has been completed, including written assets and three videos to complement the written training. From these, a draft eLearning course has been designed and shared with jurisdictions for consultation. For more information, or to get access to the training materials, contact your local implementation team.

Local snapshot-

South Australia is in the process of finalising its strategy for the next phases of the AFDRS project lifecycle, including policy updates, systems integration, stakeholder and change management, media and community education campaigns.

What is changing?

In 2022, a new Australian Fire Danger Rating System will be rolled out, and will:

- Incorporate new science based on 50 years of bushfire knowledge
- Accurately reflect more fuel types across Australia's landscape
- Better predict fire danger conditions
- Simplify and improve public information about fire danger and what actions to take
- Support strategic planning, operations, and long-term risk mitigation
- Allow for continuous improvement based on new and changing scientific knowledge, climate, and fuel loads.

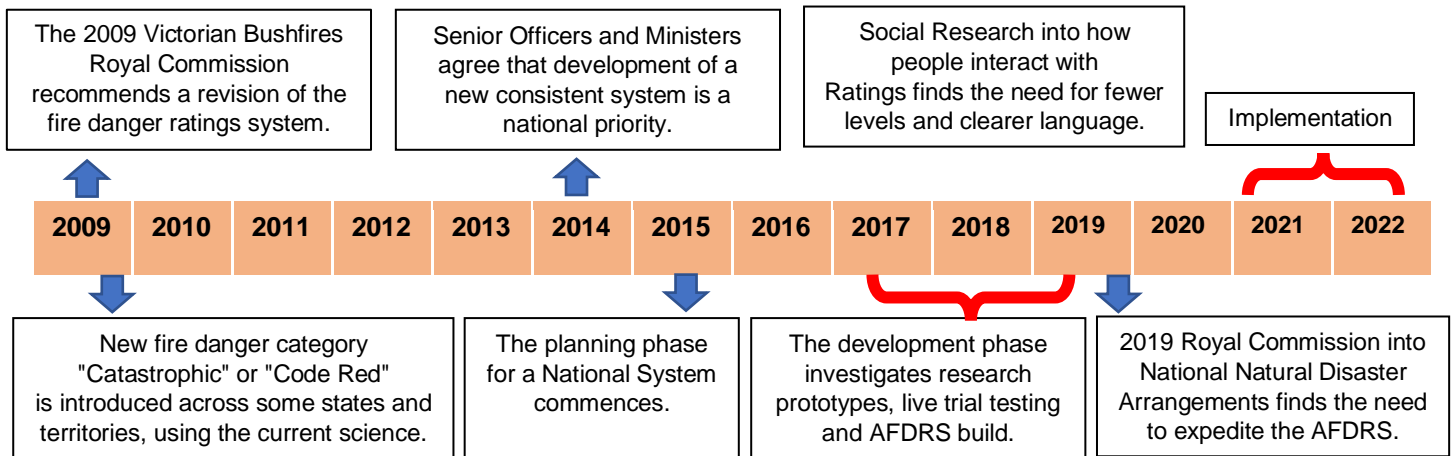
Understanding the non-zero start

Remembering that Fire Danger Rating predicts fire behaviour should a fire commence, not the likelihood of a fire starting, the science that underpins the AFDRS reflects a more sound understanding how different fuel types burn under differing conditions.

Improving this science means we can 'switch off' the system on days where no proactive action is required by the community. This isn't to say that fires can't or won't start, but that the community doesn't need to actively anticipate a fire spreading in a fast or threatening way.

The non-zero start brings fire danger into line with other hazards such as flood, cyclone, and storm.

How did we get here?



Better science

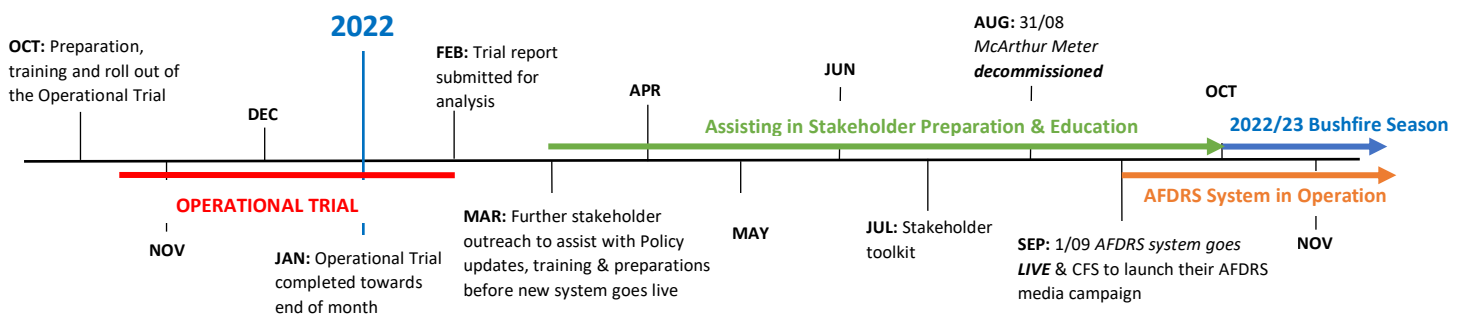
While the current system has served us well, the way of determining fire danger relies on an outdated system that assumes only grass or forest fuels across Australia. The AFDRS will take into consideration 8 fuel behaviour types and apply the most contemporary fire behaviour models across the country.

The models, when linked with Bureau of Meteorology predictions, will provide a much more accurate indication of potential fire behaviour should a fire start.

Fire Behaviour Index (FBI)

The Fire Behaviour Index is a scale of fire danger that takes the latest in fire science and produces outputs across eight different fuel behaviour types (compared to the existing two fuel types). Providing fine detail, it will support decisions about fire preparedness and bushfire suppression.

Timeline of Implementation



For more information

National Website: <https://www.afac.com.au/initiative/afdrs/afdrs-faqs>

SA AFDRS Implementation Team: CFS.AFDRSImplementationTeam@eso.sa.gov.au