



Setting the Scene

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STRATEGIC DIRECTIONS

The *Strategic Directions for Fire and Emergency Services in Australia and New Zealand 2017-2021* are endorsed by AFAC Council and the Australia-New Zealand Emergency Management Committee and offer a collective, shared vision for the future of the emergency management sector.



Resilient communities



Trusted response



Credible information



Effective governance



Knowledge and research

Predictive Services Group

We are the **strategic advisory group** to the AFAC Council on **Predictive Services**.
We are **nationally focused** and **advocate** the **future direction** of Predictive Services through collaboration and coordination.
Our initial **focus** will be on **bushfire**.



Vision: Taking the surprise out of bushfires for safer communities



Strategic outcomes 2018– 2021

Enhance capability and enable timely and informed decisions based on predictive services.

Provide confidence through scientifically rigorous, reliable and specific predictive services.

Develop predictive services through a well communicated, adaptive, innovative and collaborative approach.

Facilitate national interoperability and consistency in predictive services.



Strategic drivers and priority actions

1. Improving interoperability and sharing resources

1. Agree minimum training and accreditation standards
2. Establish operational protocols
3. Establish resource sharing arrangements

2. Leading innovation in science and technology

1. Identify/evaluate supporting systems & products
2. Improve Seasonal Outlook process
3. Develop R&D priorities
4. Development of new/improved decision support tools
5. Support research & implementation

3. Enhance predictive services capability in sector

1. Develop systems, products/info for both tactical and strategic decision making
2. Develop training for predictive services practitioners and end users
3. Establish collaboration network for practitioners

4. Enhance community understanding of risk and mitigation strategies

1. Develop stakeholder engagement plan
2. Develop comms plan
3. Strengthen collaboration with community stakeholders
4. Identify key community needs

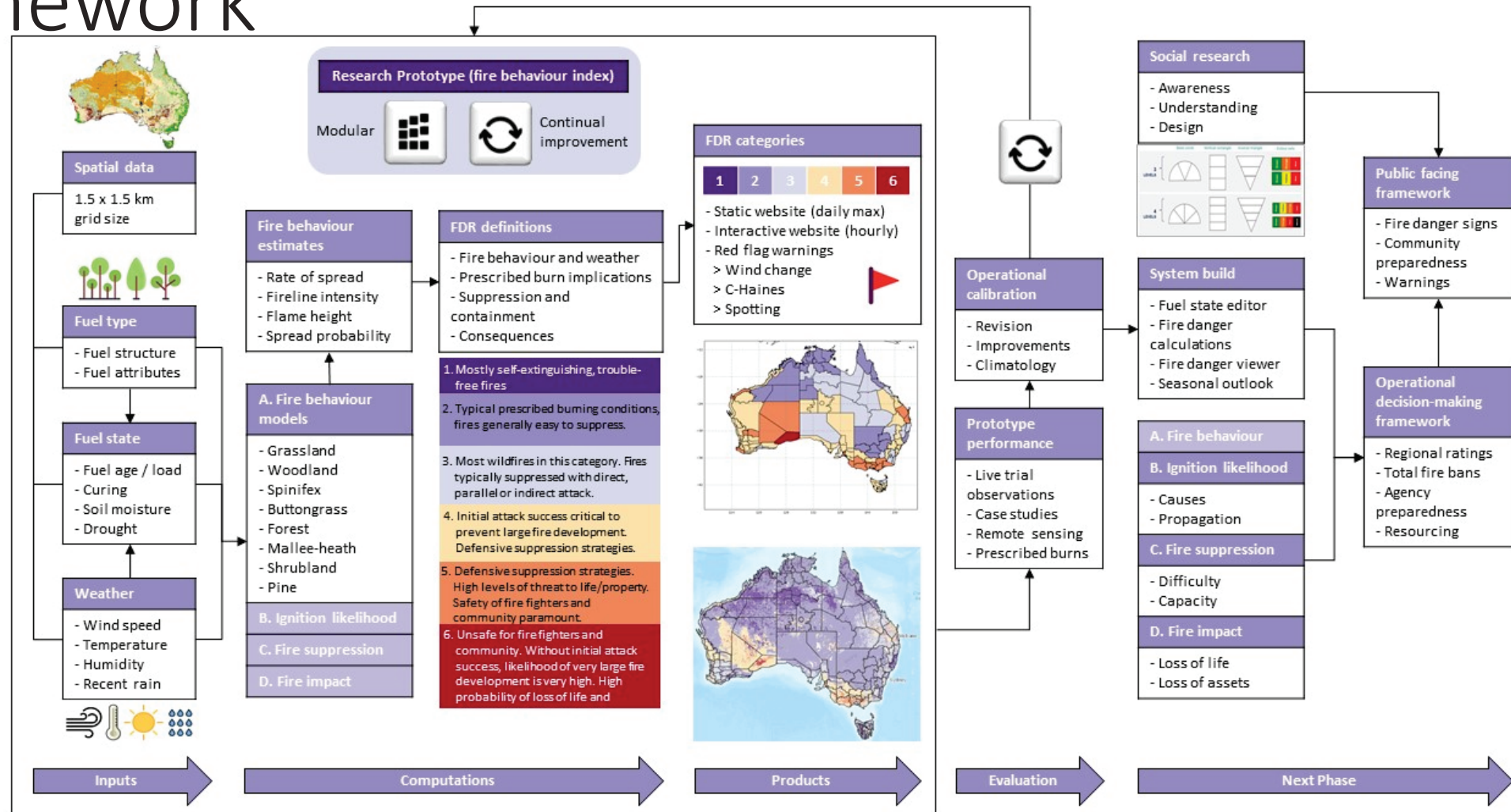
5. Develop national best practice principles and standards

1. Standards for systems, processes and data
2. Develop evaluation frameworks
3. Develop a transition to operations process

6. Harnessing projects and funding at a national level

1. Identify new strategic partners and funding sources.
2. Develop investment strategy
3. Support NFDRS
4. Support BoM Hazard Services Forum
5. Support Prescribed Burning Centre of Excellence
6. Support BNHCRC
7. Support Warnings Group

A Framework



What's missing here...

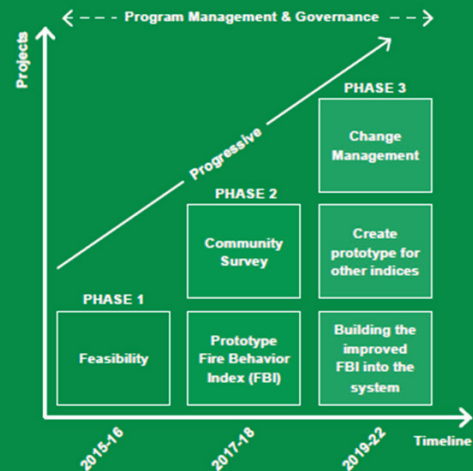
- better sensing
- better data
- better information
- better maths
- better computing
- better modelling
- better simulation
- better risk information
- better impact information ...



**better
decisions**

What's ahead?

PHASED APPROACH FOR THE PROGRAM DEVELOPMENT



PHASE 1 — Feasibility study.

PHASE 2 — Developed the Research Prototype Fire Behaviour Index (FBI) based on calculations from operationally ready fire spread models. It meets the criteria of being national, modular and open to continuous improvement.

A national social research project has identified that the current public facing system is too complex, and needs optimising, re-framing and simplification.

PHASE 3 — The new AFDRS, based on the Research Prototype Fire Behaviour Index will be built.

BENEFITS OF AFDRS



For the emergency service

The project will deliver a more accurate way of assessing the fire risk in the landscape, that is scientifically proven, and supports better decision making.



For the community

The project will deliver a system that is accurate and provides clear messages on the forecast fire danger and what actions they should consider.



For all others

To support preparedness decisions, planning, regulation of land management and other activities.



Published Reports

AFDRS Research Prototype Report 2019
www.afac.com.au/initiative/afdrs

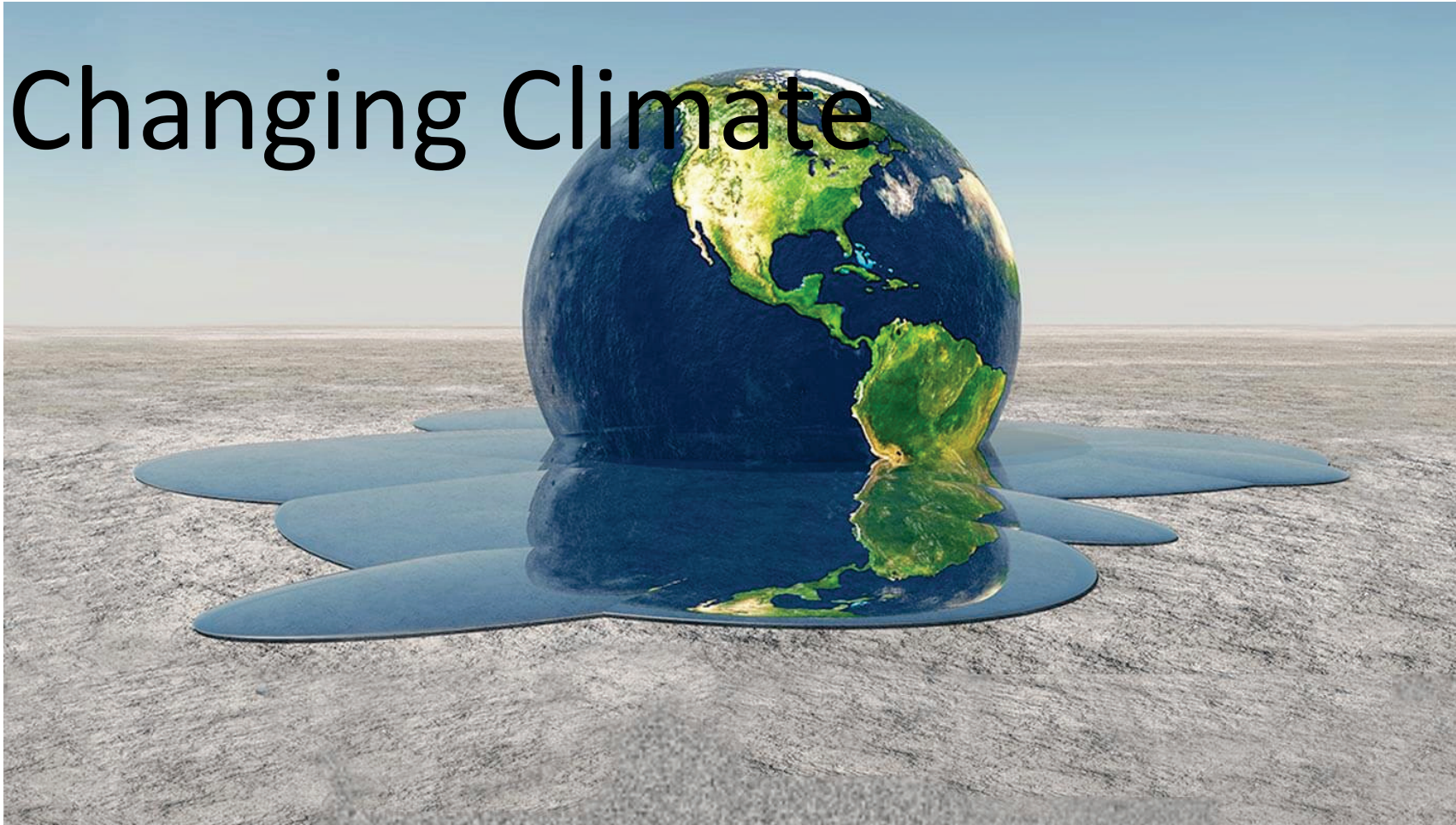
Australian Fire Danger Rating System

August 2019



What's ahead?

Changing Climate



What's ahead?

Air quality and pollution

“As one of the most significant environmental hazards after climate change, air pollution contributes to the global burden of disease (GBD) ...”





What's ahead?

Learning to deal with complexity



A Challenge

“We must move away from short-sighted, segmented planning and implementation to transdisciplinary, collaborative approaches...”

