



National
Landcare
Program



NT Soils Symposiums March 2020

National Landcare Program Smart Farms, National Soils Strategy

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NLP outcomes

- 1. Increase the protection, rehabilitation and restoration of environmental assets.**
- 2. Increase in the NRM community delivering biodiversity and natural resources practices.**
- 3. Increased awareness and adoption of land management practices that improve and protect the condition of soil, biodiversity and vegetation.**
- 4. Support the eradication of Red Imported Fire Ants and establishment of a Centre for Invasive Species Solutions research institute.**
- 5. Agriculture systems have a capacity to adapt to significant changes in climate, weather and markets.**

Smart Farms Program

The \$134 million Smart Farms program runs over six years from 2017–18.

The Smart Farms program is a key agriculture portfolio initiative under the second phase of the National Landcare Program.

- **Three elements:**
 - **Smart Farming Partnerships (\$57.5m)**
 - **Smart Farms Small Grants (\$43.5m)**
 - **Building Landcare Community and Capacity (\$33m)**

A group of brown cows standing in a field under a blue sky with some clouds. The cows are the central focus of the image, with one cow in the foreground looking towards the camera. The background shows a line of trees and a clear sky.

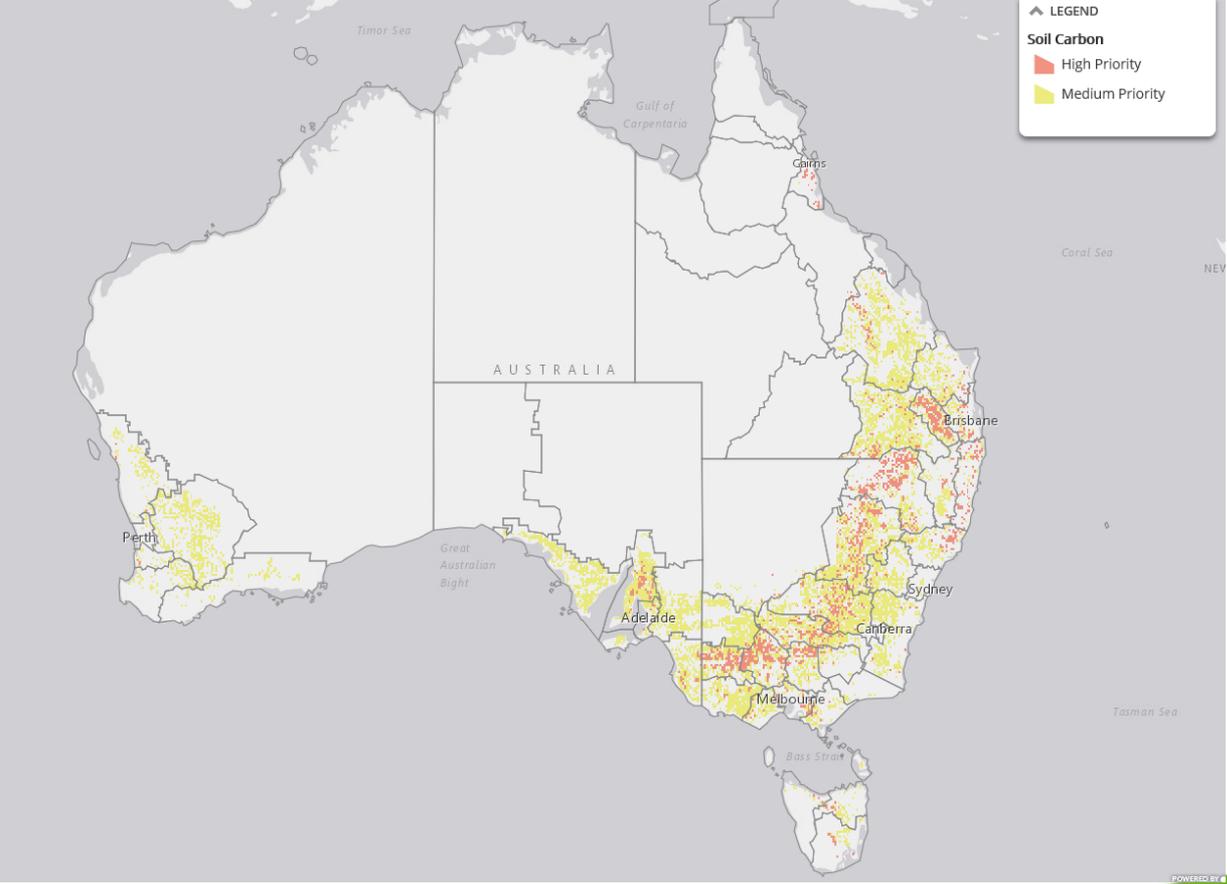
Through its three elements, Smart Farms provides funds to projects that address a range of natural resource management issues including soil health, pest and weed management, farm production efficiency, Indigenous involvement, climate and market risk and use of new technologies to improve sustainable practices.

They cover a variety of agricultural systems including cropping, livestock, mixed farming, rangelands, marine, horticulture and sugar.

Healthy soil investment priorities

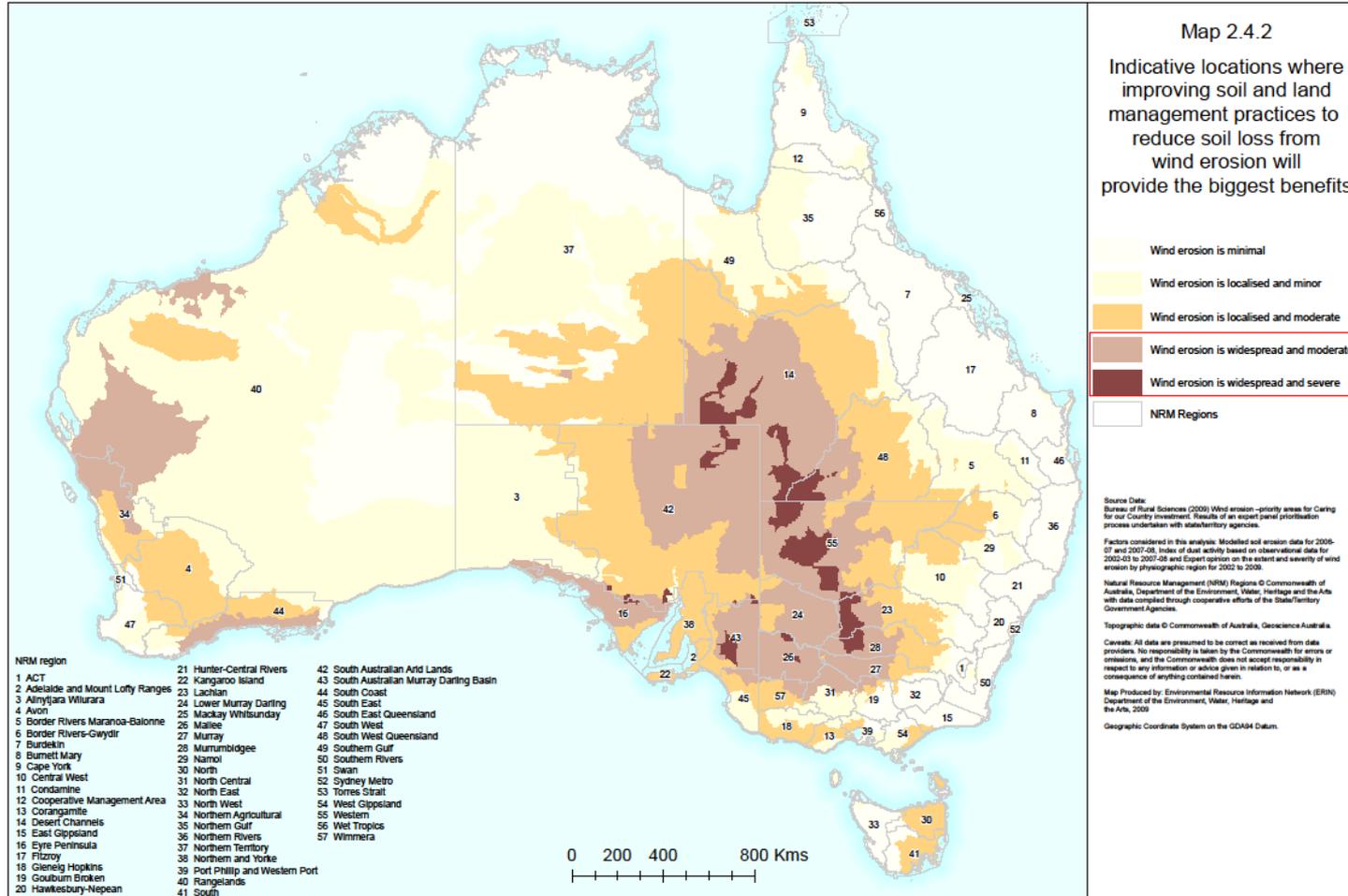
- **Soil acidification and nutrient balances**
- **Soil carbon - reduce losses, increase sequestration potential**
- **Reduce soil loss through hillslope erosion**
- **Reduce soil loss through wind erosion**

Modelled medium and high potential areas for soil carbon sequestration



Map 2.4.2

Indicative locations where improving soil and land management practices to reduce soil loss from wind erosion will provide the biggest benefits



Source Data:
Bureau of Rural Sciences (2009) Wind erosion - priority areas for Caring for our Country Investment. Results of an expert panel prioritisation process undertaken with state/territory agencies.

Factors considered in this analysis: Modelled soil erosion data for 2006-07 and 2007-08; Index of dust activity based on observational data for 2003-04 to 2007-08 and Expert opinion on the extent and severity of wind erosion by physiographic region for 2002 to 2009.

Natural Resource Management (NRM) Regions © Commonwealth of Australia, Department of the Environment, Water, Heritage and the Arts with data compiled through cooperative efforts of the State/Territory Government Agencies.

Topographic data © Commonwealth of Australia, Geoscience Australia.
 Caveats: All data are presumed to be correct as received from data providers. No responsibility is taken by the Commonwealth for errors or omissions, and the Commonwealth does not accept responsibility in respect to any information or advice given in relation to, or as a consequence of anything contained herein.
 Map Produced by: Environmental Resource Information Network (ERIN) Department of the Environment, Water, Heritage and the Arts, 2009
 Geographic Coordinate System on the GDA84 datum.

Smart Farms: Smart Farming Partnerships, some funded soils projects

Farmlink Research Limited: Future proofing the soils of southern and central NSW from acidification and soil organic carbon decline

Andrea Koch Agtech Pty Ltd: Translating peer reviewed soil science into digital soil management tools and a new soil management system for land managers, using a novel collaborative innovation model

Ag Excellence Alliance Incorporated: Warm And Cool Season Mixed Cover Cropping For Sustainable Farming Systems In South Eastern Australia – will demonstrate using mixed species cover crops across south eastern Australia to improve soil organic carbon, structure and health, while decreasing weed and disease in commercial crops.

Queensland University Of Technology: Unlocking the true value of organic soil amendments, an innovative farm-ready tool for the effective management of manures and composts into farm fertiliser budgets for environmental, soil health and economic sustainability

Smart Farms: Smart Farming Partnerships

A water buffalo with large, curved horns stands in a wetland area. The ground is covered with tall, green grass and shallow water. The background shows a flat landscape with a line of trees under a clear sky with a few birds flying.

CSIRO: Landscape scale herd management of unmanaged cattle and buffalo in northern Australian indigenous estate to support economic development, landscape restoration and protection of cultural and environmental assets.

Smart Farms: Smart Farms Small Grants

- **Open competitive grants program to support shorter on-ground projects (up to two years)**
- **Grants range from \$5,000 to \$200,000 – varies for each round**
- **Designed for six annual rounds of funding (2017-18 to 2022-23)**
- **2 rounds already funded, 187 projects**
- **Round 3 closed 19 December, waiting for final decisions**
- **Envisaged that Round 4 will open in 2020/21**

Smart Farms: Smart Farms Small Grants

- There are 31 projects primarily addressing issues related to soil health across the country. The NT projects cover a range of soil health management techniques, including:

Northern Territory Soil Consortium - Building Land Manager Capacity and Knowledge in Soil Health and Conservation trialling a bio-active fertiliser containing biochar to assess its impact on soil carbon and fertility.

Bringing soils back to life through water ponding – West Kimberley Land Conservation District Committee

Twin Spring Station Land Consolidation and Water Retention—Adapt and Adopt for NT, Aqua Tropics Pty Ltd

Promoting Sustainable Forestry Practices in the Northern Territory, TNRM

The Tropical Biosolids Project will develop a beneficial use framework to improve soil health on agricultural land, replacing use of chemical fertilizers through recycling nutrient-rich, organic, biosolid waste, Territory Property Group Pty Ltd

Supporting NT primary producers to integrate natural resource management into productive cropping systems, Northern Territory Farmers Association Incorporated

Improving the health and resilience of pastoral leases across the Kimberley and Pilbara through rangelands rehydration and restoration techniques, Kimberley Pilbara Cattleman's Association Inc.

Smart Farms: Smart Farms Small Grants

The purposes of these grants are to:

- increase land manager's awareness, knowledge, capability and adoption of tools and management practices that will deliver more productive and profitable agriculture, fishing, aquaculture and farm forestry industries;
- protect Australia's biodiversity;
- protect and improve the condition of natural resources (in particular soils and vegetation); and
- assist Australia to meet its obligations under relevant international treaties.

Smart Farms: Building Landcare Community and Capacity (BLCC)

The BLCC has been designed to meet an identified need for a flexible funding program that could underpin the delivery of agriculture-focussed, strategic, capacity building initiatives as they are identified.

Targeted funding will help support, build and motivate the individuals and groups delivering improved natural resource management outcomes

Activities include (but not limited to):

- Awards and leadership
- Conferences, communication, and promotion activities
- Delivery of on-ground improvements in land management

Soils for Life funded over four years for their project: 'Soils for Life Resilient Agricultural Landscapes – Case Studies Program' 30 case studies around the country. Project just commencing

Other websites for information on NLP2 and Smart Farms

- <http://www.agriculture.gov.au/ag-farm-food/natural-resources/landcare/national-landcare-program/australian-government-investment-in-landcare>
- See also www.nrm.gov.au

National investment and initiatives in soil health and management

National Landcare Program Australian Government and State/Territory Governments

CRC for High Performance Soils. Soils CRC Local Governments

National Soil RD&E Strategy, 2015 Regional Natural Resource Management (NRM) Bodies

Soil Science Australia Rural Development Corporations (RDCs) Tertiary Research Institutes

The Australian Collaborative Land Use and Management Program (ACLUMP)

Australian Soil Network Australian Collaborative Land Evaluation Program (ACLEP)

National Committee on Soil and Terrain Australian Soil Resource Information System (ASRIS)

National Soil RD&E Strategy, 2015

In July 2015, the Australian Government developed the National Soil RD&E Strategy, 'Securing Australia's soil for profitable industries and healthy landscapes' in partnership with state and territory governments and research agencies. The Strategy aims to ensure that soil research is better targeted and more collaborative, and meets the needs of farmers, policy makers and other stakeholders. CSIRO and the Grains Research and Development Corporation (GRDC) have led the implementation of this strategy. The strategy aims to:

- improve co-investment to generate and apply new soil knowledge
- improve the quality, availability and access to soil data and information
- improve the communication and exchange of soil knowledge
- adopt a national approach to building future skills and capacity, and
- collaborate on the use of physical infrastructure for soil research.

The National Soils Strategy

On 18 July 2019 the Prime Minister, the Hon Scott Morrison MP, announced a national approach to soil management, and the re-appointment of Major General Michael Jeffrey as Australia's National Soils Advocate. The National Soils Advocate's report 'Restore the Soil: Prosper the Nation' in December 2017 played a major part in raising the national profile of soils. It highlighted that effective soil management will significantly improve agricultural production and profitability, whilst protecting natural resources.

The role of the National Soils Advocate is to provide advice on the Government's objective to improve the health of Australia's landscape, guarantee our nation's food security and support sustainable farming communities.

The position of the National Soils Advocate sits within the Department of Prime Minister and Cabinet – more information about the Advocate and the role's Terms of Reference can be found on the PM&C website.

The National Soils Strategy

A photograph of four men standing in a lush green field under a clear blue sky. They are all wearing wide-brimmed straw hats. The man on the far left is wearing a light blue button-down shirt and jeans, and is looking down at something in his hands. The man next to him is wearing a pink shirt and jeans, also looking down. The man in the center is wearing a blue long-sleeved shirt and jeans, with his hands on his hips. The man on the far right is wearing a white button-down shirt and jeans, looking towards the center. The background consists of a line of trees and a clear sky.

Following the Prime Minister's announcement, Agriculture Ministers at the Agriculture Ministers' Forum (AGMIN) meeting, in October 2019, agreed to collaborate on the development of a National Soil Strategy, led by the Commonwealth.

The approach to developing the strategy is being worked through by the Department of Agriculture, Water and the Environment, and is expected to include consultation with stakeholders in the jurisdictions and soil community.

The Future Drought Fund (FDF)

The Australian Government is investing \$3.9 billion, growing to \$5 billion, in the future-proofing Future Drought Fund. Extensive national consultation occurred in late 2019 to input into the design of the FDF.

This long term, sustainable investment will make \$100 million available each year for projects that help our farmers and communities become more prepared for, and resilient to, the impacts of future drought. This funding will start from July 2020.

Through grants or other arrangements, the Fund will support research and innovation; research extension; adoption of existing and new technology; improved environmental and natural resource management; and small-scale infrastructure and community initiatives.

The Future Drought Fund (FDF)

A young girl with brown hair, wearing a dark long-sleeved shirt and purple corduroy pants, is running through a dry, brown field. She is kicking up dust or dirt as she runs. The background shows a line of trees under a sky filled with large, grey, dramatic clouds. The overall scene conveys a sense of resilience and activity in a drought-affected environment.

- These projects will continue to deliver lasting benefits, even during the good years, by helping to lift the productivity and profitability of the agriculture sector and enhance the health and sustainability of our farming landscapes.
- Minister Littleproud signed the Drought Resilience Funding Plan on 11 February 2020. The Plan is a rolling four-year high level framework – to ensure a coherent and consistent approach is undertaken when considering and providing funding for drought resilience projects.
- You can stay informed about upcoming FDF projects (from 1 July 2020) through the department's Have Your Say website.

The background of the slide is a photograph of two people riding horses through a forest. The scene is captured in silhouette against a bright, golden sunset. The sun is positioned behind the trees, creating a strong backlighting effect that silhouettes the riders and the tree trunks. The overall color palette is dominated by warm, golden-yellow and orange tones. The text is overlaid in the center of the image.

Thank you!
Questions and Answers