

# Meeting 1 of the Soil RD&E Implementation Committee

CSIRO Corporate Centre Conference Room

Limestone Avenue, Campbell, ACT

Tuesday 24<sup>th</sup> February 2015

## Agenda

- 9:00 Welcome and recap on the development of the Soil RD&E Strategy and the role of the Implementation Committee
- 9:30 ITEM 1.1: Election of the Chair
- 10:00 ITEM 1.2: Governance and membership
- 10:30 *Morning Tea*
- 11:00 ITEM 1.3: Review and prioritization of the work plan (Table 8, p53)
- 12:30 *Lunch*
- 1:15 ITEM 1.4: Update on the activities of the Advocate for Soil Health
- 1:30 ITEM 1.5: Development of the science research priority on soil and water for the Commonwealth Science Council
- 1:45 ITEM 1.6: Proposed Australian Soil Assessment Program (NCST)
- 3:15 *Afternoon Tea*
- 3:45 ITEM 1.7: Program support, funding and business development
- 4:45 Other business
- 5:00 *Meeting close*

Soil RD&E Implementation Committee	Meeting Number: 1
	Location: Canberra
	Date: 24 <sup>th</sup> February 2015
AGENDA Paper	ITEM 1.1
Election of the Chair of the Soil RD&E Implementation Committee	
<p><b>Background</b></p> <p>The general role of the Chair is proposed to be as follows.</p> <ul style="list-style-type: none"> <li>• The Chair will be independent and step back from representing their particular jurisdiction, organization or sector.</li> <li>• The Chair will take an impartial role in facilitating the operation of the committee and advancing implementation of the national strategy.</li> <li>• The Chair may wish to nominate another person to contribute to the committee to represent their jurisdiction, organization or sector.</li> <li>• The Chair will be expected to work closely with CSIRO in their role as lead agency and with GRDC (lead RDC for the strategy) and facilitate the operation of the implementation committee to fulfil its stated role.</li> </ul> <p>The Chair will be elected for a two-year term. If there is more than one nominee, the Chair will be elected by a process of elimination. Each round of voting will be by secret ballot. In each round, the nominee with the least votes will be eliminated. The Soil RD&amp;E Secretariat will arrange for voting <i>in absentia</i> if requested.</p>	
<p><b>Key issues</b></p> <p>The election of the initial Chair of the Soil RD&amp;E Implementation Committee is following the above process. However, agreement is needed to confirm that this process is appropriate and will be followed in future elections.</p>	
<p><b>Required action</b></p> <ul style="list-style-type: none"> <li>• Review the procedure for electing the Chair of the Soil RD&amp;E Implementation Committee.</li> <li>• Through consensus, endorse or modify the procedure.</li> </ul>	
<p><b>Resource implications</b></p> <p>None apart from the in-kind contribution of time from the home organization of the chair.</p>	
<p><b>Preparation and consultation</b></p> <p>Soil RD&amp;E Secretariat with inputs from members of the Soil RD&amp;E Implementation Committee.</p>	
<p><b>Attachments</b></p> <p>None</p>	

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AGENDA Paper	ITEM 1.2
Governance and membership	
<p><b>Background</b></p> <p>The roles and responsibilities of the Soil RD&amp;E Implementation Committee are clearly stated in Soil RD&amp;E Strategy (e.g. Attachment 1, Section 6) and the broader governance framework for the committee is outlined in the foundation documents of the National Primary Industries Research, Development &amp; Extension Framework (Attachment 2). In particular, the Framework provides guidelines on governance and ongoing management arrangements (see Section 3.4).</p> <p>However, several more detailed matters of governance for the Soil RD&amp;E Implementation Committee need to be clarified to ensure its efficient and effective operation.</p>	
<p><b>Key issues</b></p> <p><b>Membership of the Soil RD&amp;E Implementation Committee</b></p> <p>The Soil RD&amp;E Strategy stipulates (p49) that the Implementation Committee will comprise representatives from organisations that play a major role in funding and/or providing soil RD&amp;E and that have committed to contribute resources to achieve strategy goals. The committee is a voluntary and inclusive partnership but the current membership needs to be tested against the definition to ensure that all relevant organizations are represented. For example, at present the committee does not have a formal representative from NRM organizations. In some cases, organizations may choose to have a representative acting on their behalf.</p> <p><b>The role of members on the Implementation Committee</b></p> <p>A closely related matter is the need for members of the committee to declare who they represent and how they liaise with their jurisdiction or organization(s). For example, a jurisdictional representative from an agriculture department needs to declare whether they represent the department alone or broader jurisdictional interests. This is particularly relevant when dealing with soil issues that relate to multiple portfolios (e.g. soil erosion and water quality).</p> <p><b>Funding calls and the preparation of project submissions to such calls</b></p> <p>The Implementation Committee needs to be consistent with both the Soil RD&amp;E Strategy and the broader intent of the Primary Industries RD&amp;E Framework. This may be compromised if the committee becomes directly involved in funding bids (e.g. through formal or informal endorsement of particular bids and not others). However, the committee must address a range of issues that are central to the establishment, coordination and expansion of the funding base for soil science in Australia.</p> <p><b>Decision making processes</b></p> <p>While not formally stipulated in the foundation documents of the Soil RD&amp;E Implementation Committee (Attachments 1 and 2), it is implied that all decisions shall be taken by consensus unless, by consensus, another method of arriving at a decision on certain measures is reached.</p>	

This should be clarified.

### **Required action**

That members:

1. Consider whether the current membership of the Soil RD&E Implementation Committee is appropriate and suggest actions if there are significant gaps.
2. Discuss and clarify the roles and expectations of members, particularly in relation to their reporting and liaison roles within their respective organizations and jurisdictions.
3. Discuss and agree on the position of the Implementation Committee in relation to funding calls and the preparation of project submissions to such calls.
4. Discuss and agree on the decision-making processes within the Soil RD&E Implementation Committee.

### **Resource implications**

None.

### **Preparation and consultation**

Soil RD&E Secretariat

### **Attachments**

1. [The National Soil Research, Development and Extension Strategy](#)
2. [National Primary Industries RD&E Framework - Statement of Intent](#)

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AGENDA Paper	ITEM 1.3
Review and prioritization of the work plan	
<p><b>Background</b></p> <p>Table 8 (p53-56) of the Soil RD&amp;E Strategy (Agenda Item 1.2, Attachment 1) provides an indicative timetable for achievement of the five strategy goals. The ambitious work plan shows a schedule running from March 2014 to June 2015.</p>	
<p><b>Key issues</b></p> <p>The indicative timetable needs to be revised due to delays in establishing the Soil RD&amp;E Secretariat.</p> <p>There also needs to be a realistic analysis of what can and can't be achieved given the significant resource constraints being experienced by most member organizations.</p> <p>The list of implementation actions needs to be prioritized, re-scheduled, and checked for any significant omissions.</p>	
<p><b>Required action</b></p> <p>Members are requested to discuss the timetable and prepare a revised version of Table 8.</p>	
<p><b>Resource implications</b></p> <p>Most actions in Table 8 have associated resource implications and this is a primary consideration during the revision.</p>	
<p><b>Preparation and consultation</b></p> <p>Soil RD&amp;E Secretariat</p>	
<p><b>Attachments</b></p> <p>See Attachment 1, Item 1.2.</p>	

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AGENDA Paper	ITEM 1.4
Update on the activities of the Advocate for Soil Health	
<p><b>Background</b></p> <ul style="list-style-type: none"> <li>• In October 2012 former prime minister the Hon. Julia Gillard announced the appointment of former Governor-General Major General the Hon. Michael Jeffery as Australia's first Advocate for Soil Health. The appointment was made in response to the recommendations of a former Parliamentary Working Group on Water, Soil and Food, which identified a need for improved public awareness of the importance of soil.</li> <li>• Prime Minister Abbott wrote to General Jeffery on 20 December 2013 extending his appointment as Soil Advocate until the end of 2014. Prime Minister Abbott also requested that the Soil Advocate provide input into the agricultural competitiveness and northern Australia white papers.</li> <li>• The Advocate for Soil Health is responsible for raising public awareness of the importance of improving the condition of Australian soils, and works to Terms of Reference agreed by the Department of Agriculture (2014 terms of Reference are at <a href="#">Attachment 1</a>).</li> <li>• The Department of Agriculture provides secretariat support for the Soil Advocate, including arranging some meetings with stakeholders and assisting with the preparation of reports.</li> <li>• An Expert Advisory Panel and a broader Consultative Group support General Jeffery by providing technical advice and commenting on draft reports. Expert Advisory Panel members are Neil McKenzie (CSIRO), Richard Doyle (University of Tasmania), Iain Young University of New England) and Lyn Abbott (University of Western Australia).</li> <li>• Since becoming Soil Advocate General Jeffery has travelled to every state and territory and met with farmers, soil and landscape researchers, policy makers, educators, industry representatives, community groups and students to build his understanding of soil and land management issues and opportunities across Australia.</li> <li>• General Jeffery has also met with senior representatives from a number of government agencies including the Department of the Environment, the Department of the Prime Minister and Cabinet, the Bureau of Meteorology, Geoscience Australia and CSIRO.</li> </ul>	
<p><b>Key issues</b></p> <ul style="list-style-type: none"> <li>• General Jeffery has requested that the Soil Advocate role be extended until the end of the 2015 International Year of Soils, and the request is currently being processed by the Minister for Agriculture and the Prime Minister.</li> <li>• General Jeffery strongly supports the intent of the National Soil RD&amp;E Strategy and would like to stay engaged with the implementation process.</li> <li>• General Jeffery will be attending part of the upcoming meeting of the National Committee on Soil and Terrain in Canberra on 5 March 2015.</li> </ul>	

**Required action**

For information

**Resource implications**

None

**Preparation and consultation**

The Department of Agriculture assisted with the preparation of this paper. The department has provided secretariat support for the Soil Advocate since the role was established in December 2012.

**Attachments**

Attachment 1: Soil Advocate Terms of Reference 2014

## Attachment 1: SOIL ADVOCATE TERMS OF REFERENCE 2014

**Mission:** to provide strong leadership, policy input and advocacy on the importance of healthy soil, water and vegetation and the benefits for all Australians.

The focus of this role is on raising public awareness of the importance of improving soil and landscape condition and soil information, and the critical role soil plays in underpinning agricultural productivity, delivering high quality ecosystem services and meeting global challenges such as climate change. Though appointed to this role by the Australian Government, the Advocate for Soil Health will not speak on behalf of the government.

Specified tasks	Implied tasks	Resources required
Advocate that the healthy condition of our soils must be a national priority.	Convince a national audience of the importance of soil health, based on the integrated management of soil, water and vegetation through: <ul style="list-style-type: none"> <li>• One on one meetings with leaders and influencers</li> <li>• Speaking engagements</li> <li>• Engaging with schools to educate children</li> <li>• Papers</li> <li>• Media engagement and releases</li> <li>• A webpage (to be managed by the secretariat).</li> </ul>	Secretariat support (including access to the department's media team).
Report to the Australian Government on national priorities for soil and landscape science and management. Deliver an initial report to the Prime Minister, an interim report to the Minister for Agriculture, and a final report to the Prime Minister.	Seek advice from technical experts and practitioners on current soil research, development and extension needs, including identifying the current deficiencies.	Access to Chief Scientist(s) for advice on coordination of research effort, including international efforts. Access to leaders of research bodies, including universities and research and development corporations. Support from the secretariat in compiling and drafting reports.
Work towards ensuring that existing and new soils research meets the needs of Australia's farmers and other soil managers.	Determine what information; encouragement and help farmers need to build soil health as a priority activity within their business. Engage with the National Implementation Committee for the National Soil Research, Development and Extension Strategy through regular meetings and correspondence.	Opportunities to consult with land managers about their needs, and to encourage them to adopt soil health as a priority for their businesses. Access to the National Implementation Committee for the National Soil Research, Development and Extension Strategy.
Advocate for adequate knowledge and supporting systems to help farmers to actively build healthy soils.	Advocate for resourcing to be linked to Land Management organisations' contribution in delivering positive soil health actions 'on ground'. Ensure that training/education in soil health reflects best practice. Use case studies to communicate proven leading practices to farmers.	Review of current soil health and related fields education, with an emphasis on practical level organisations. Review of existing data on wider adoption trends.
Contribute to the Australian Government white papers on agricultural competitiveness and northern Australia.	Liaise with key stakeholders including technical and policy experts to develop relevant input for the development of the white papers.	Regular communications with the white paper taskforces within the Department of Prime Minister and Cabinet.



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AGENDA Paper	ITEM 1.5
Development of the science research priority on soil and water for the Commonwealth Science Council	
<p><b>Background</b></p> <p>The Commonwealth Science Council held its inaugural meeting on the 27<sup>th</sup> November 2014 (<a href="#">follow this link to Commonwealth Science Council</a>). The Council strongly supported the development of national science and research priorities. They also supported identifying two or three practical challenges for each priority. These priorities and practical challenges are intended to help focus the nation's research effort, and help assure that some public funding for research addresses the most important questions facing the nation. The proposed priority areas are:</p> <ul style="list-style-type: none"> <li>• Food</li> <li>• Soil and Water</li> <li>• Transport</li> <li>• Cybersecurity</li> <li>• Energy and Resources</li> <li>• Manufacturing</li> <li>• Environmental Change</li> <li>• Health</li> </ul> <p>The priorities are designed to align research excellence with Australia's needs. They represent community interests, industrial strengths and growth plans, comparative advantages and global trends.</p> <p>The next step in the process is to develop a set of practical research challenges for each priority. Expert Working Groups are being formed with members including researchers, industry representatives and government officials. The Soil and Water Expert Working Group will be chaired by Mr John Gunn, CEO of the Australian Institute of Marine Science. This Working Group will meet on the 2<sup>nd</sup> of March 2015.</p>	
<p><b>Key issues</b></p> <p>The Soil RD&amp;E Strategy provides a key resource for the Soil and Water Expert Working Group. Much of the preliminary analysis and identification of priorities for the Working Group has been done. However, the Implementation Committee will need to be closely engaged with the Soil and Water Expert Working Group to ensure the best outcome.</p> <p>Section 4.4 of the Soil RD&amp;E Strategy proposes seven 'national soil research and development strategic directions':</p> <ol style="list-style-type: none"> <li>1. Improving soil management to increase agricultural productivity and profitability</li> <li>2. Quantifying the soil asset in space and time: mapping, modelling, monitoring and forecasting</li> <li>3. Solutions to manage soil/subsoil constraints</li> <li>4. Soil and its role in delivering ecosystem services</li> </ol>	

5. Managing soil across the landscape
6. Harvesting, verifying and communicating innovations in soil management
7. Capturing bright ideas to deliver world-class outcomes

Details are provided on p35-37 of the Strategy. These national soil research and development strategic directions provide a logical starting point for framing the practical challenges.

### **Required action**

- Review the 'national soil research and development strategic directions'
- Discuss options for the two to three practical challenges requested by the Chief Scientist
- Consider how the Implementation Committee can best provide input to the Soil and Water Expert Working Group.

### **Resource implications**

None at this stage.

### **Preparation and consultation**

Soil RD&E Secretariat in consultation with the office of the Chief Scientist.

### **Attachments**

Attachment 1: [Strategic science and research priorities](#)

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AGENDA Paper	ITEM 1.6
Proposed Australian Soil Assessment Program	
<p><b>Background</b></p> <p>The National Committee on Soil Terrain (NCST) has provided national leadership and technical coordination for matters relating to soil and terrain since its establishment in 1992.</p> <p>Soil and land survey programs were most active and effective during the Accelerated Program of Land Resource Assessment in the Decade of Landcare (1990-2000). A complex set of factors led to a reduction of effort over the next 15 years. The soil management challenges facing Australia are large (e.g. SOE 2011) and there is a clear need for much better information on the condition and trends in the status of Australia's soil resources. Some renewal of the survey, monitoring and complementary RD&amp;E activities is essential.</p> <p>The NCST addressed this issue by preparing a key input to the Soil RD&amp;E Strategy – a report outlining the proposed Australian Soil Assessment Program (ASAP) (Attachment 1). This report has not been officially published although there is considerable benefit in distributing it to a wider audience than those directly involved in the development of the Soil RD&amp;E Strategy.</p> <p>The NCST report provides a comprehensive plan for reengineering the national soil information infrastructure so that it can provide the required data and information to regularly assess the condition of soils and their responses to land management across Australia.</p> <p>The NCST estimated that full implementation of ASAP required an ongoing annual investment of \$99.7m to support seven streams of nationally coordinated and regionally delivered activities. This investment has the potential to generate large benefits worth at least \$2 billion per annum by 2020. These benefits arise primarily from:</p> <ul style="list-style-type: none"> <li>• increases in agricultural productivity (potentially \$2–4 billion per year)</li> <li>• avoidance of costs in other soil dependent industries (potentially hundreds of millions of dollars per year)</li> <li>• equally large societal and ecosystem-service benefits associated with better soil and land management.</li> </ul> <p>While some of the required investment may come from better coordination of current soil research and development expenditure, a significant new investment is required to revitalise and upgrade the current national soil information infrastructure.</p> <p>During 2014, the NCST clarified various matters relating to implementation, program design and proposed work-plans. However, further progress now depends on successful implementation of the Soil RD&amp;E Strategy.</p>	
<p><b>Key issues</b></p> <p>The NSCT report identifies two key institutional issues that need to be resolved before proceeding with any of the streams of activity (see '<i>Options for improving the return on investment</i>' on p39-40).</p>	

1. A formal and enduring mandate for soil resource assessment has to be developed. One mechanism to achieve this could be the incorporation, by legislation, of soil resource assessment activities into one or more agencies. This mandate is essential because of the long timeframes required to build the soil resource information base and to monitor soil change over several decades.
2. The second key institutional issue relates to the organizational and business model for ASAP. Four broad institutional options are identified by the NSCT but the list is not exhaustive. The new investment and institutional model has to focus on both public and private sector needs.

### **Required action**

Committee members are asked to:

- Review the NSCT report and endorse its publication by the NCST as a formal input to the Soil RD&E strategy development and implementation process.
- Identify the most appropriate mechanisms for developing a formal and enduring mandate for ASAP.
- Consider the suggested institutional models and outline a pathway to implementation.
- Consider the proposed budget and identify strategies for implementation.

### **Resource implications**

The proposed Australian Soil Assessment Program is a relatively large investment and there are implications for the reallocation of existing resources and acquisition of new funds.

### **Preparation and consultation**

NCST, contracted consultants and extensive liaison with stakeholders.

### **Attachments**

Attachment 1: NCST (2013). Establishing the Australian Cooperative Soil Assessment Program. Supporting Australia's sustainable future through improved knowledge of Australian soils and their responses to land management. A report prepared by the National Committee on Soil and Terrain for the Soil Research, Development and Extension Reference Group 22<sup>nd</sup> March 2013.

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AGENDA Paper	ITEM 1.7
Program support, funding and business development	
<p><b>Background</b></p> <p>Most agencies involved in the Soil RD&amp;E Strategy have budgets that are reducing in real terms. Furthermore, some of the large Australian Government programs into soil and land related areas have been scaled back during the last few years (e.g. the Natural Heritage Trust and then Caring for Our Country). The Soil RD&amp;E Strategy implies redirection of existing funds and in some cases new investments (e.g. ASAP) along with the development of partnership agreements (e.g. for managing shared infrastructure).</p>	
<p><b>Key issues</b></p> <p>The Implementation Committee needs to increase investment into soil research, development and extension. This requires an agreed plan, good strategy and sound business development.</p> <p>The Implementation Committee requires a wide-ranging discussion on options before determining its preferred course of action.</p>	
<p><b>Required action</b></p> <p>Members participate in a wide-ranging discussion and consideration of actions that should increase investment to support the implementation of the Soil RD&amp;E Strategy.</p>	
<p><b>Resource implications</b></p> <p>If successful, this Agenda Item should lead to actions that increase resources available to member organizations.</p>	
<p><b>Preparation and consultation</b></p> <p>Soil RD&amp;E Secretariat</p>	
<p><b>Attachments</b></p> <p>None</p>	