

The mission of the Science and Information Division, as espoused in the Division's strategic plan, is to;

"provide up-to-date and scientifically sound information to underpin effective conservation and land management in W.A."

For the Division to achieve its mission, the research must be **applied, practical, aligned** with CALM's corporate mission, **scientifically sound** and **transferable** to operations.

CALM's policies and management strategies must have a sound scientific basis if they are to meet contemporary management goals and if they are credible in the public eye. To ensure this, the department has a science directorate comprising some 100 highly qualified scientists and technical assistants. The Division has in place the appropriate protocols to ensure maintenance of scientific standards. These include the Science Project Plan process, annual staff appraisals, scientific seminar series, and internal peer review of manuscripts. While publication of scientific papers is not the end point of CALM's applied research, it is an important component of our activities, for it is largely through the quality and breadth of scientific publications that the soundness of our policies and practices will be judged. For example, in highly controversial management areas such as timber harvesting and prescribed burning, we have been able to scientifically defend our practices by reference to scientific publications. Unlike community based conservation groups, the unsubstantiated opinions of public servants carry little weight in rigorous community and scientific debate. We must continue to advance our scientific understanding of the ecosystems we manage and we must continue to publish our work in reputable scientific journals.

The provision of a sound and relevant scientific and technical service to managers is a primary function of the SID. The Division needs to have in place formal protocols to ensure that the research is applied and relevant to CALM's corporate mission. It is crucial that strong linkages, or alliances exist between the Division and the broader CALM, to facilitate the continuous interaction which is necessary for research to be relevant, applicable and the knowledge readily transferable to operations.

Informal (personal) and formal (institutional) linkages play a key role. Personal networking and linkages take on many forms within the Division and help to ensure that the research meets the above criteria. However, the extent to which this occurs depends on the initiative and "culture" of individuals, both within and outside the Division. In many instances, strong personal linkages are not established and the developing of research priorities has been largely left to the discretion of individual scientists. This has the effect of weakening alliances and linkages with CALM operations and is an impediment to the transfer of knowledge and technology. The result is that CALM has not received full benefit from its substantial investment in research.

To improve both informal and formal linkages between the SID and CALM operations, I propose the following:

1. Develop management alliances by the creation of formal Research and Development (R&D) Action Groups.

These groups should be based on operational entities within CALM. The "terms of reference" of these groups could be to;

- Identify management issues, opportunities and problems requiring technical solutions and to set research priorities to address these.
- Identify new major initiatives of economical and/or ecological benefit to the State.
- Identify potential sources of funding for high priority research (SID appropriation, business units, primary programs, Corporate Executive, external sources, etc.).
- Provide a conduit for information flow between SID and operations activities.
- Facilitate the transfer and implementation of research outcomes to operations.
- Group membership could consist of relevant senior and mid level management staff and relevant SID Group Head and Section Manager. The following table is an **example only** of such groups. Further discussion within SID and with various operations functions is needed to finalise the nature and composition of groups.

Table 1: An **example** of some R&D Action Groups to facilitate the setting of research priorities and implementation of findings.

R & D ACTION GROUP	OPERATIONS REPS.	SID REPS.
Plantations	Seamus Mullholland, Gavin Alice, John Kaye	John McGrath, Richard Harper, Richard Mazanec
Tree Breeders	(This group already exists)	
Native Forests	John Murch, Alan Seymour, Jack Bradshaw	John McGrath, Lachie McCaw, Forest Ecologist
Sandalwood	Ian Keally, Frank Mckinnell,	John McGrath, Lachie McCaw,
Wildlife Conservation	Ken Atkins, Peter Mawson, Andrew Burbidge.	Keith Morris, Dave Coates, Alan Burbidge
Environmental Protection	Frank Batini, Roger Armstrong, Paul Jones	Dave Algar, Greg Keighery, Dave Coates
Marine Conservation	Chris Simpson, Greg Pobar,	Keith Morris, Bob Prince
Recreation and tourism	Col Ingram, Wayne Schmidt, David Hampton	Neville Marchant, Keith Morris
CALMfire	Rick Sneeuwjagt, Drew Hasswell	Lachie McCaw, Forest Ecologist
Biological Survey and reserves		Neville Marchant, Norm McKenzie, Neil Gibson
Information Systems	Colin Pearce	Nicholas Lander, Paul Gioia
Waterways and Wetlands	Gordon Wyre, ??	Stuart Halse, Jim Lane

2. Put in place performance indicators and reward systems which recognise the importance of both good science and the application/implementation of research findings. I have recently circulated a list of proposed performance indicators for research scientists. This will be refined after taking account of comments from a wide range of people within CALM.

Note: I would appreciate your comments and suggestions on this proposal.