Workforce Planning in the Science Division

Department of Conservation and Land Management

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Executive Summary

As with other sections of the Public Service in WA, the Department of Conservation and Land Management (CALM) has an ageing workforce. As at June 2003, about 12% of CALM's workforce was over 55 years of age and eligible for retirement, with about 30% eligible for retirement within the next 10 years. This issue is more pronounced in the Department's Science Division where about 60% of staff will be eligible to retire over the next 10 years. CALM's policies, activities and outcomes are underpinned by science, much of which is generated by the Science Division. Minimising the adverse impacts of this potential loss of experience, knowledge and skill on the Department's capacity to deliver conservation and land management outcomes requires advanced planning and management action.

This plan anticipates new and emerging research themes likely to be faced by the Science Division and identifies the general characteristics of the workforce needed to meet these challenges. If CALM chooses to maintain a significant in-house research capacity, then a most pressing need will be to ensure a pool of experienced scientists and technical staff upon which to draw to provide sound scientific leadership and authoritative technical and policy advice. The plan details key strategies and actions to ensure an orderly, managed succession of trained and experienced staff with leadership qualities. Key strategies to achieve this are:

- Recruitment and mentoring
- Increasing capacity through partnerships
- Retention and diffusion of corporate knowledge
- Development and training of the existing younger cohort
- Incentives to retain older, experienced staff in the workforce for longer

Following endorsement of the plan by the Department's Corporate Executive, implementation of the plan will be the responsibility of the Director of the Science Division.

1. Background

Australia, along with other countries, is undergoing transition to a knowledge-based economy driven by scientific, engineering and technological advances. Science-based knowledge underpins Western Australia's future as a thriving, cultured and responsible community. At a recent high level science forum, the Premier and Minister for Science Dr Geoff Gallop emphasised that; "*Science is crucial to achieving the government's objectives*". At the same forum, Australia's Chief Scientist Dr Robin Batterham stressed that; "*To be internationally competitive, the name of the game is knowledge intensity, or the capture, diffusion and generation of knowledge*".

Innovation, based on ideas, novel concepts, modern techniques and newly discovered facts, is a key factor in improving the State's triple bottom line – its economy and its quality of life of its citizens, without compromising the sustainability of the environment. This notion, and the need to maintain a research capacity in the State government sector, is explicit in the Premier's Science Council report (Premier's Science Council 2002). To be successful, public sector research must be excellent, relevant and have an impact.

The mission of the Department of Conservation and Land Management (CALM), as espoused in the Corporate Plan (2002-2005) is:

"*In partnership with the community, we conserve Western Australia's biodiversity, and manage the lands and waters entrusted to us, for their intrinsic values and for the appreciation and benefit of present and future generations*".

To accomplish this mission, the Department's policies and operations need to be underpinned by the incorporation of up-to-date knowledge and new knowledge must be disseminated through the organization to empower managers and policy makers. The Department must also maintain a core of "in-house" expertise to provide accurate and timely scientific and technical advice to the Department, the Minister and the wider community. Not only will this enable CALM to do its job effectively, but it will enhance the Department's public standing.

1.1. Why workforce planning?

Workforce planning is about building and maintaining a workforce (people) capacity to effectively conduct business into the future. With respect to this, a most acute issue is that the global workforce is ageing and the data show that there is a potential for a large group of Western Australian public servants to retire in the next 5-10 years (www.dpc.wa.gov.au). Of major concern is the consequent loss of people from the public sector, especially in the middle and senior level management, who have extensive corporate knowledge, wisdom and experience. In this respect, CALM is a microcosm of the broader public sector and the Science Division has an older workforce than the Department as a whole. This provides a most pressing reason for the need for a strategy to manage this reality to minimise potential adverse impact on the future capacity of the Department and of the Science Division.

As part of the 2002/2003 CEO Performance Agreements, CEOs are required to make "formalised progress towards providing for workforce planning in their Agency". The Public Sector Management Division (PSMD) (2002) has described workforce planning as;

"*providing a framework for integrating and aligning a range of human resource management strategies while taking account of the organisation's mission, strategic plan and budgetary resources*".

This plan is not intended to address the broad range of issues that might be implied by this

definition, but is a means of ensuring that the Science Division has the staffing capacity to meet the Department's scientific and technical needs and demands into the future. It is about *"having the right people with the right skills doing the right jobs at the right time"* (PSMD 2002). This plan sits within the framework of the Department's Corporate Plan and the Division's Strategic Plan (1999-2004). It identifies likely future trends and demands for outputs and services by the Division as well as factors that are likely to influence our staffing capacity to meet these demands. It addresses a range of human resource issues relevant to the Division including work practices, succession planning, staff development and career pathways, recruitment and selection. This plan focuses on the Department's conservation and land management science capacity, so does not address the needs of the Perth Observatory.

2. Analysis of Demand

The Science Division represents CALM's major investment in generating, gathering and transferring the scientific knowledge and technological advances required for successful conservation and land management outcomes. The mission of the Science Division, as stated in its Strategic Plan (1999-2004), is:

"In consultation with CALM's Regions, Districts and Primary Programs, and in collaboration with other relevant agencies, the Science Division will provide up-to-date and scientifically sound information to uphold effective conservation and land management in Western Australia".

The Science Division's Business Plan (2002-2004) sets out the role of the Division as a service provider to purchasers within the Department of Conservation and Land Management (CALM) and the Forest Products Commission (FPC). It enunciates how the Division will deliver services identified in the Service Provider Agreements (SPAs) by describing the aim of the Key Science Themes (Groups) and the objectives, outcomes, adoption strategies and performance measures of the Division's Key Result Areas (Programs). The plan also presents the organizational structure and marketing strategy needed to deliver these services throughout the duration of the plan. The Division's Operations Plan and Research Activity Report (http://calmweb.calm.wa.gov.au/drb/science/index.html) provides greater detail about the current activities of the Division.

2.1 Current focus and future trends

The key science and technical information services currently required by various output programs, and the likely future trends (strategic themes – not prioritised), are described in detail in the Divisional Operations Plan and Service Provider Agreements and are summarised below.

2.1.1 Nature Conservation Output

- High level policy and technical advice
- Understanding of the biology, ecology and conservation status, and threats to the State's threatened flora, fauna and ecological communities.
- Preparation and implementation of recovery programs for threatened taxa and communities and input to area management plans, prescriptions and guidelines.
- Biological survey of the State to assist in the design of a comprehensive, adequate and representative conservation reserve system, as well as documenting the State's biota.
- Knowledge of ecological disturbances that threaten the conservation estate and important off-reserve conservation areas and values.
- Information about the functioning and conservation of aquatic ecosystems and their components.
- Access to inventory of plant biodiversity at the Western Australian Herbarium.
- Assistance in training of CALM staff in techniques appropriate to biodiversity

conservation.

- Provision of information to increase public awareness of nature conservation issues.

Strategic Themes:

Landscape conservation

- Ongoing development of plant-based solutions to dryland salinity
- Restoring degraded landscapes, especially in the wheatbelt, rangelands and deserts.
- Enhancing the viability of remnants, corridors and networks.
- Reconstruction of fauna and flora assemblages.
- Ecologically sustainable forest management
- Impacts of weeds, pests and diseases and their control
- Understanding the implications of climate change on biodiversity

Threatened species & ecological communities

- Ongoing taxonomic assessments of various groups
- Increasing focus on conservation of invertebrates, fungi and cryptogams.
- Increased activity on threatened flora
- Increased focus on threatened ecological communities
- Conservation of wetlands and aquatic ecosystems
- Increased activity on diseases (esp. *Phytophthora*) and environmental weeds.
- Ongoing activity on introduced predator control

Fire ecology, behaviour and management

- North Kimberley savanna woodlands
- Interior hummock grasslands
- Remnant vegetation - wheatbelt and urban bushland
- South-west forests, woodlands, heaths and mallee shrublands
- Rangelands

Biodiversity information acquisition and management

- Ongoing biological survey
- Biodiversity monitoring
- Development of integrated, accessible biological information management systems (e.g., see Florabase, Naturemap and *Naturebank* proposal).
- Ongoing high level technical and scientific advice and diffusion of knowledge (internally & externally)

2.1.2 Sustainable Forest Management Output

- High level policy and technical advice
- Knowledge needed to develop, implement and monitor forests according to the principles of Ecologically Sustainable Forest Management (ESFM).
- Assistance in the preparation of the New Forest Management Plan.
- Input to area management plans, prescriptions and guidelines
- Understanding of the response to fire and harvesting disturbance.
- Knowledge of impacts of forest operations on water yield and quality.
- Evaluation and development of potential indicators for sustainable forest management, regeneration success, soil disturbance and soil nutrient status.
- Development of a forest monitoring system to quantify, record, interpret and report on the status of key forest organisms, communities and processes in response to both forest management activities and natural variation.
- Provision of information on the effects of forest management on insect pests and diseases.
- Advice on the management of impacts of prescribed and wild fire on forest ecology.
- Provision of a disease detection service for *Phytophthora* and other plant diseases.

Strategic Themes

- Decline in timber production due to the planned reduction in timber harvesting from native forest. Possible commensurate reduction in funding available for related research.
- Increase in public expectation that forest management and timber production can be demonstrated to be ecologically sustainable.
- Increase in public sensitivity about the risks to biodiversity conservation and other forest values.
- Climate change as it effects carbon cycles, forest management and productivity.
- Long term effects of prescribed burning in forest ecosystems.
- Increasing demand to manage forests for potable water.
- Biological survey of forests
- The impacts of forest management including fire and timber harvesting on threatened and sensitive species and communities.

2.1.3 Parks and Visitor Services Output

- Input to the preparation of area management plans.
- Knowledge about natural features, animals, plants and other biota in National Parks, Nature Reserves and Conservation Parks.
- Provision of information for interpretation and nature-based tourism operations.

Strategic Themes

- Increase the provision of research information that is relevant to interpretive services.
- Possible requirement to increase "in-house" capacity to conduct research and to manage outsourced research into the impacts of visitation on biodiversity values and visitor behaviour.
- Develop a capacity to research social issues relevant to indigenous and non-indigenous communities.
- Joint management, co-management and close liaison with traditional land owners will require the capacity to work with communities at various levels including working with social workers, community advisors and anthropologists.

2.1.4 Forest Products Commission

- Knowledge for the long-term sustainable utilization of native forests and indicators of ecologically sustainable forest management (ESFM).
- Understanding of forest ecology so that harvesting and regeneration operations are in accordance with ESFM principles.
- Provision of information about appropriate species, genotypes, soils, and silvicultural prescriptions to maximize production from existing plantations.
- Assistance in training of FPC staff in the management of native forests.
- Monitoring of native forest management impacts on biodiversity and ecosystem processes.
- Input to management plans, prescriptions and guidelines

Strategic Themes

- Ongoing commitment to forest monitoring (FORESTCHECK)
- Ongoing studies of the impacts of timber harvesting on sensitive threatened species and communities.
- Forest soil conservation
- Forest health – pests and diseases.
- Implementation of research priorities specified in the New Forest Management Plan

There are a number of ways in which the Department could procure the necessary science and information to underpin and guide management including maintaining a significant in-house capacity, through to partial or complete out-sourcing of science. Currently, the Science Division generates most of the terrestrial science delivered to the agency, but a significant amount is also delivered externally through partnerships and collaborations with academia and other research institutions. For example, some 52 post-graduate students are working with the Science Division on a wide range of projects of importance to the Department. The Department, largely through the Division, is a participant in eight Cooperative Research Centres, and outside the CRC program, is a collaborator with scientists from other agencies on a many projects (see Science Project Plans). There are obvious advantages and disadvantages of the various models for delivering science and this issue is likely to be addressed by the recently formed Research Advisory Committee. The Division has limited capacity to undertake marine research, much of which is conducted or managed by the Marine Conservation Branch. The Division does not undertake social sciences research or investigate the interactions between people and the environment. This function is largely outsourced and managed by the Parks and Visitor Services Division.

3. Current Funding and Workforce Capacity

3.1. Funding

Detailed breakdowns of the Division's resources are contained in the Business Plan and the Operations Plan and are summarised in Table 1 below.

Table 1: The value ($) of services provided to internal and external purchasers as at June 2003:

Group	NC Output	SFM Output	FPC	Total	External Purchaser
WA Herbarium	1 600 804			1 600 804	140 000
Biodiversity Conservation	5 739 072			5 739 072	1 000 000
Forests & Tree Crops	675 263	1 955 633	754 717	3 385 613	150 000
Observatory	719 158			719 158	120 000
Directorate	767 320	117 338	45 283	929 941	
Total	9 501 617	2 072 971	800 000	12 374 588	1 410 000

Notes: The above figures include Pilbara Survey ($1 705 000), Salinity ($364 077), Australian Virtual Herbarium ($48 000); Regional Herbarium ($30 000), Greenhouse ($309 334), CE Flora Translocations ($70 000) and Capital User Charge ($152 874). With the immanent transfer of some 7 staff FPC, this budget column ($800 000) will also transfer to FPC).

Changing economic circumstances that have and may continue to impact on the Division's capacity include:

- The Department's move to an Output Purchaser Provider business model, which in essence places the Division on a "fee for service" business arrangement.
- Declining revenue from the native forest timber industry, which impacts on industry and FPC capacity to purchase research.

- Declining revenue from external contestable sources such as the Natural Heritage Trust.
- Possibility of declining CF allocation
- Greater reliance on "recoupable" projects and partnerships

Further discussion of strategies and tactics to manage this trend is provided in the Business Plan.

3.2. Workforce capacity

Detailed breakdowns of the Division's staffing allocations to various themes and projects are contained in the Business Plan, the Operations Plan and individual Science Project Plans and are summarised in Table 2 below.

Table 2: Staff resources in the Science Division (as at December 2003)

	Research Scientists	Technical Officers	Admin. & Library Officers	Total
Full time permanent FTEs	49	34.1	15	98.1
Contract FTEs	8.6	6.7	3.7	19
Contract FTEs – externally funded	6.6	5.4	2.4	14.4
				131.5

Note: The above table includes 10.9 Perth Observatory FTEs (4.0 RS, 4.9 TO, 2.0 other) and excludes staff to transfer to FPC (4.0 RS, 3.0 TO, 2.0 TO – contract externally funded).

Typical of many other sections of the Department, and of other public sector agencies, it is clear that the Science Division workforce is an ageing one (Figures 1 and 2 below). What are the facts about the age demography of the staff in the Science Division? An analysis of the Department's age profile carried out by CALM (Connell 2002) found that the Science Division has an older workforce (all employment groups) than the Department as a whole, with about 75% of its workforce over 40 years of age and only about 10% under 30. As a group, 81% of research scientists are over 40, with 9% under 30 years old (see Figure 1 below). About 60% of this group will be eligible to retire over the next 10 years. The situation is similar for the technical officer group.

This right-skewed age class distribution is a result of workforce stability (relatively few resignations, low rate of retirement) and the limited opportunity for recruitment of permanent employees. Most 'recruitment' has been by way of contract staff funded using external funds, which are relatively short term (1-3 years). In the absence of a management response, the consequences of this age profile for the future capacity of the Division and the Department are obvious. Simply put, there will be an abrupt brain drain, with loss of experience, knowledge, wisdom and expertise which will not be readily replaced.

Fig. 1: Age class distribution - Science Division

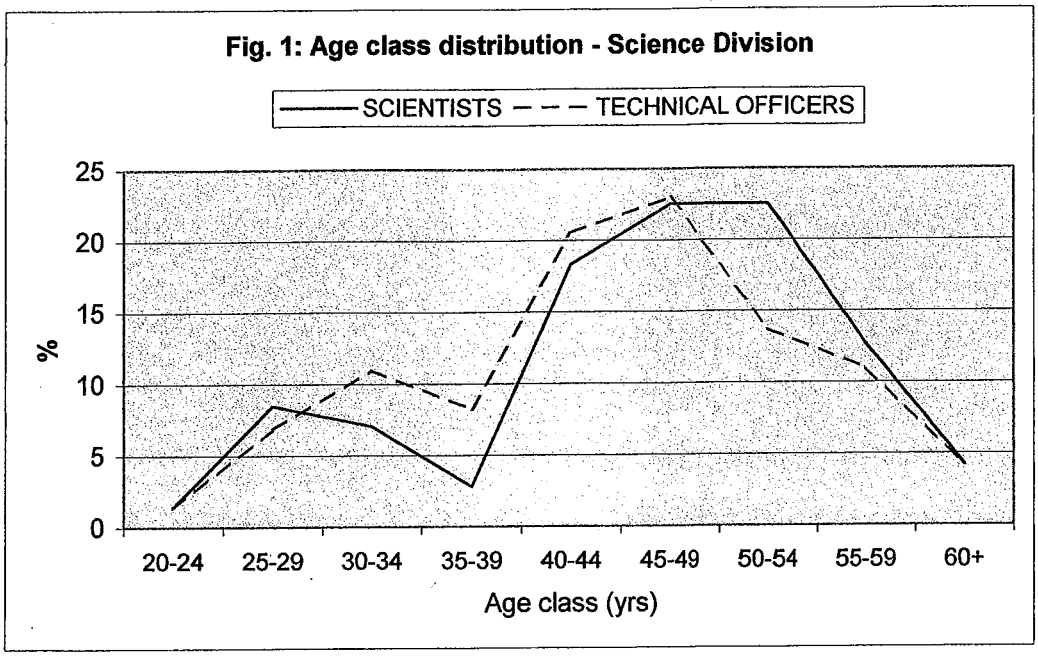
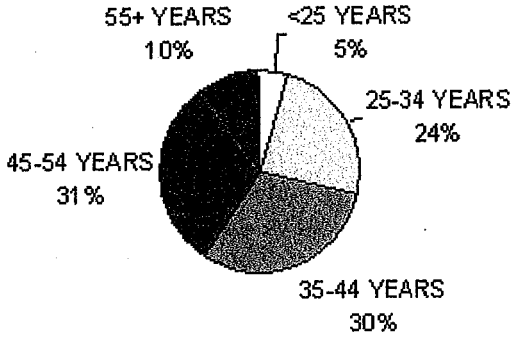


Fig. 2: WA Public Sector Workforce Age Profile: June 1998



Source: HR MOIR Anonymous Individual Employee Records, June 1998

This reality presents both a potential problem and an opportunity. It is timely for the Division to explore this and to develop strategies for action to meet the scientific and technical challenges of the future with an ageing workforce. The corporate and technical knowledge and experience of older scientists and technical officers needs to be retained and preferably institutionalised by diffusing this knowledge via mentoring to a pool of younger, less experienced people.

Western Australia, comprising about one third of the Australian continent, is recognized on a world scale for its outstanding natural landscapes and its biodiversity. The south-west region has been identified as one of the world's 25 hotspots of biodiversity and the only one in Australia. It is a key part of the Department's charter to manage for the conservation of this biodiversity, which requires a firm scientific knowledge base. A strength of the Department

is its relative capacity to generate knowledge through the activities of the Science Division. Many CALM scientists and technical officers have an extensive and in-depth knowledge of various facets of the State's biodiversity and of the impacts of disturbances such as fire, pests and diseases, timber harvesting, salinisation and introduced predators.

The Division's scientist and technical staff can be broadly classified into four groups. Firstly, there are "taxon specialists", a group who are highly specialized, having a sound knowledge of the biology and ecology of specific taxonomic groups such as mammals, birds, reptiles, vascular plants, fungi, or of disciplines such as taxonomy, physiology, conservation genetics, molecular genetics, biometrics and information technology. Secondly, there are "ecosystem specialists", a group that have good knowledge of particular ecosystems such as aquatic, wetlands, forests, heathlands and arid ecosystems. The third group is the "disturbance specialists" that have expertise in disturbance ecology and ecosystem processes such as fire, logging, hydrology, silviculture, nutrient cycling, weeds, feral animals, pests and diseases.

Indeed, a number of older staff, the fourth group, have a broad and in-depth knowledge of many or all of these facets, and of the broader conservation issues facing the State, and of the political and policy settings around conservation and land management. This knowledge, wisdom and capacity to synthesise complex information, have been accumulated over many years of service, of systematically observing, studying, discriminating and recording biological and ecological information, from documenting and interpreting the landscape characteristics, ecological communities and species in many of the State's bioregions, and from interactions with interstate and international colleagues spanning decades. The depth of knowledge and experience, and hence the conservation science and management leadership qualities of many older scientists in this group, is extremely valuable and important in providing sound strategic level advice to the Department, to governments at various levels and on a broad range of conservation and natural resource management issues. Their direct involvement in management and policy issues has increased their value to the Department. These experienced scientists with a broad knowledge base are also valuable mentors for younger scientists.

4. Workforce Capacity to Meet Future Needs

The above admixture of scientific skills has served the Division and the Department well. This is evidenced by the extensive published output (Wright 2002) and the nationally and internationally recognized achievements of the Department in a range of conservation and land management activities. These include Western Shield, salinity programs, wetlands management, disease management, species and communities recovery plans, Florabase, fire management, biological survey, reserve acquisition, forest management and the establishment and management of commercial plantations and tree crops for environmental services.

Based on the forecast future trends (outlined above), it is expected that such a diversity of expertise and disciplines, with some adjustments (see below), will be required to meet the future demands as outlined above. The key issue for workforce planning in the Division and the Department is retaining or having access to this skills base into the future. By and large, obtaining or developing the skills set of the first three groups of scientists will be relatively manageable. Young graduates skilled in IT, modern analytical techniques, molecular genetics etc. and with the potential to be good research scientists are readily available in the employment market, and graduates with 5-10 years experience as a research scientist will have developed high levels of competency in their respective disciplines.

Of the four broad groupings described above, it is those staff in the fourth group, the older, experienced group, many of whom are at or approaching the time when they could choose to retire, who will be most difficult to replace largely because such a depth and breadth of

knowledge has been hard won by these individuals over a long period of association with natural resource management, research and policy development. Ensuring that there is sufficient overlap for building and maintaining a core group of staff with broad experience, knowledge, wisdom and scientific leadership qualities before the existing staff retire is therefore the most urgent priority.

To ensure that the Science Division has the right blend of skilled people to meet future challenges in conservation in an environment of competing demands for limited resources and increasing demands for services, a number of strategies will need to be explored. The Department is also committed to achieving greater diversity in its workforce, particularly with regard to Indigenous Australians, women, people from culturally diverse backgrounds, people with disabilities, and youth. Corporate Executive has identified Indigenous Australians and women as key areas of focus. This needs to be considered across each of the workforce planning strategies outlined below.

4.1 Workforce Planning Strategies and Actions

Workforce planning must be appropriate to the current and forecast future needs, as outlined. They must also be realistic and consistent with public sector protocols (constraints) and with current and foreseeable funding circumstances. The strategies developed here are based around:

- Recruitment and mentoring
- Retention and diffusion of corporate knowledge
- Development and training of the existing younger cohort
- Incentives to retain older, experienced staff in the workforce for longer
- Building capacity through partnerships

4.1.1. Recruitment and Mentoring

There are limited opportunities for significant recruitment of full time permanent staff. However, such opportunities do arise from time to time through retirements, voluntary and forced separations or budget adjustments. With respect to skills base, people with tertiary and post-graduate training in environmental science and natural resource management skills, although inexperienced, are likely to be readily available as most universities across the country offer this training. In most disciplines the graduate pool is significant and is unlikely to be a factor limiting recruitment. Careful consideration will need to be given to ensure a good balance of scientist and technical staff when recruitment opportunities arise with a 1:1 ratio being appropriate in most circumstances.

Action: The Division will expand its skills base in the areas of biological modelling, IT (especially GIS), fire ecology, taxonomy, molecular conservation genetics (fauna), landscape ecology and population ecology by recruiting in these disciplines when recruitment opportunities present. Aim to recruit at least 2 young people per annum into these roles over the next 5 years as opportunities arise.

Action: There is an ongoing need to conduct biological surveys, which require careful planning, implementation and analysis. There is an urgent need to recruit and train younger people capable of filling this role into the future. The Pilbara Biological Survey (2002-2006) provides an opportunity to recruit and train a biologist in these skills. Aim to recruit a person into this role within 12 months.

Action: There may be a need to further develop an in-house capacity to both undertake and manage the out-sourcing of social sciences research given the increased level of community

participation in conservation and land management and in ecotourism. With Parks and Visitor Services, investigate the desirability of employing a social scientist.

Action: Advance opportunities to recruit potential research scientists and technical officers through the Department's Graduate Cadet Program and continue to participate in the National Indigenous Cadetship Program.

Action: Continue to foster the involvement of Honours and post graduate students in research projects that are relevant to CALM. This should provide a pool of trained scientists with some understanding of the State's biota, of conservation issues and of the Department's philosophy, mission and processes (see 4.4. below).

Action: Provide opportunities for experienced staff to work with and mentor recruits and junior staff. The formation of multi-disciplinary teams to tackle major research issues provides an opportunity for young inexperienced staff to work with experienced staff and broaden their understanding of conservation biology.

Action: Through the proper mechanisms, disengage staff who consistently perform poorly or are surplus to requirements, thereby providing opportunities for recruiting quality staff to meet future challenges.

4.1.2. Retention and diffusion of Corporate Knowledge

Action: Successors and recruits need ready access to existing knowledge and information. This can be achieved in a variety of ways:

- Electronic systems for warehousing and transferring knowledge (e.g., *Naturebank* proposal).
- Formal and informal mentoring/apprenticeship programs (the Department is currently initiating a mentoring program).
- Formal knowledge transfer fora (e.g. field days, recovery teams, symposia, etc.).
- Documentation and publication of knowledge by older scientists particularly.
- Oral histories and briefings.
- Staff exchanges (Science Division staff spending short periods (up to 12 months) in Districts, Regions and specialist branches, and *vice versa*).

4.2. Development and training of the existing younger cohort

Action: IDAPES provides a formal vehicle for identifying staff development and training needs. Line managers, beginning with the Director, must emphasise the importance and value of staff development (wellbeing, training, promotion, transfers, staff exchanges, coaching, professional development, acting opportunities, etc.) to both the individual and the organization, and be willing to invest in this. The role of mentoring is discussed above.

4.2.3 Incentives to retain older, experienced staff in the workforce for longer

Despite the right-skewed Divisional age demographic, it is not compulsory for staff to retire when eligible to do so. Spreading the "loss" of experienced staff from the workforce over a longer time frame, as well as keeping the expertise, increases the opportunities for retention and diffusion of knowledge and buys time for other strategies to be activated and to take effect. The following incentives are already in place to encourage older, experienced people who are recognised for their valuable contribution to stay in or associated with the work place either in a full time or part time capacity:

- Criteria progression to L8 (Research Scientist) and L5 (Technical Officer)
- Research Fellowships (for retirees)
- Increased level of responsibility with respect to strategic direction, design and implementation of works programs.

The following actions aim to further encourage older, experienced and valued staff to remain in the workforce.

Action:

- Increased level of works program responsibility for high performance senior staff.
- Increased opportunities for involvement in management decisions, policy formulation and direction setting.
- Allowing people at or above retirement age a proportion of their work time (say 15%) to pursue science projects that are of personal interest but relevant to the mission of the Division. This assumes that if people are enjoying their work, they may choose to continue working in the Department.
- Explore and encourage part-time working arrangements.
- Phased retirement (see below)

Phased retirement: The Department of the Premier and Cabinet has prepared a discussion paper "Phased retirement in the Western Australia public sector" (2003) (www.dpc.wa.gov.au) in which it proposes a number of retirement options:

- The potential retiree accesses their money in the government employee's superannuation fund and contracts back to Government.
- The potential retiree keeps working but on a part time basis with minimal impact on their superannuation.
- The potential retiree continues full-time work but takes a voluntary reduction in salary level for less responsibility with no effect on superannuation.
- The potential retiree reverts to part-time and accesses some of their superannuation funds.
- The potential retiree enters into an agreement with the employee for deferred leave or/and purchased leave.

Phased retirement is a "whole of government" issue and one that cannot be unilaterally acted upon by CALM or the Division. It is recommended that the Department, through the Directorate of Corporate Services, actively pursue this initiative with the Department of the Premier and Cabinet.

4.4. Building capacity through partnerships

Academia

Currently there are about 52 post-graduate students from local universities working with, or being supervised by, Science Division staff. CALM is also engaged in some 20 collaborative research projects with academics. In addition, a number of Science Division staff hold adjunct positions at universities and contact students through undergraduate programs. Undergraduates, graduates and post-graduates often work with CALM as volunteers. These programs are important means of training young local scientists in biodiversity conservation research, management and administration. They also provide a pool of people who understand the agency, who have some understanding of nature conservation issues in WA and who could be prospective employees of the Department.

Partnerships - other agencies

CALM is currently a participant in some 8 CRCs and has some 35 collaborative projects with various agencies including CSIRO and other government departments. This provides opportunities for directly engaging scientists outside the Department on issues relevant to the Department. The Department of the Premier and Cabinet, through the Office of Science and Innovation, have provided funding incentives for collaborative research between various government agencies, which also provides opportunities for employing young scientists.

Action:

- Actively seek opportunities for closer formal and informal partnerships with universities, CRCs and other research institutions through mutually beneficial collaborations, joint funding applications, by providing increased opportunities and in-kind support to students, and by increasing the stipends and funding available for post-graduate programs, ARC Linkage programs etc. Aim to increase by 30% the number of post-graduate students working with the Division, or on projects relevant to the Department, over the next 5 years (68 students by 2008). Increasing our capacity to build partnerships may require the appointment of a person with the appropriate background and networking skills to focus on this task.

5. Responsibility for Implementing the Workforce Strategy

It will be the responsibility of the Director Science Division, with the assistance of the Science Management Council (SMC), and CALM People Services Branch, working within the Output Purchaser Provider framework, to update and implement this plan. SMC will review progress annually as part of the preparation of Service Provider Agreements.

References

Connell, W. (2002). An age profile of the Department's workforce by division as at January 2002. CALM internal report.

Department of the Premier and Cabinet (2003). Phased retirement in the Western Australian public sector. A discussion paper. (www.dpc.wa.gov.au).

Premier's Science Council (2002). Report on research in Western Australian state Government agencies (http://www.sciencecouncil.dpc.wa.gov.au/reports.htm)

Public Sector Management Division (2002). Workforce beyond 2000: Focussing on the future. Workforce planning case studies in the Western Australian Public Sector.

Wright, L.J. (2002). BiblioResearch: a bibliography of research outputs by the Department of Conservation and Land management (and its predecessors) relating to the flora, fauna and forests of Western Australia, 1896-2001. *Conservation Science Western Australia* 4(2).