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Secretary.....*Fullan*.....

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HOUSE OF REPRESENTATIVES  
STANDING COMMITTEE ON  
ENVIRONMENT AND HERITAGE

26 February, 2003

Committee Secretary  
House of Representatives Committee on Environment and heritage  
Parliament House  
CANBERRA ACT 2600

Dear Sir or Madam,

Re: Submission to hearing on Employment in the Environment sector

Background

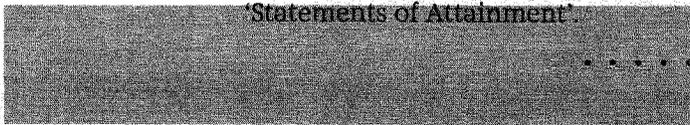
As the Sole Director of Didg Information Systems Pty Ltd I have an extensive background in the generation of innovative goods and supply services to enterprises, environmental professionals and wildlife enthusiasts.

My own background is a combination of 24 years experience in information technology, of which 20 have been commercial, combined with 10 years experience as an ecological field surveyor. I have been employed, contracted or serviced a wide range of public and private entities. I am a member of various professional associations, including the IEEE Computer Society, the Spatial Sciences Institute of Australia, the Ecological Society of Australia and the Taxonomic Database Working Group.

I attended the entire Melbourne hearing as an observer, and found the proceedings extremely valuable.

My perspective is as someone who is involved in the supply-chain of providing observations that are used to populate databases, and the description, appreciation and interpretation of that data for determining and reporting on the abundance and distribution of wildlife. These databases are very rare, expensive to create, are irreplaceable and have the unusual property of being most valuable both the younger and older they are. This aspect is one of the technologies of field ecology, and it underpins all other assessments (such as impact statements).

Another side to being an ecologist who produces reports is the actual practice of ecology. This is more analogous to being a doctor, and shares the characteristic of being almost guild-like as a profession. There is a high degree of uncertainty in diagnosis, not enough information to be definitive and serious consequences of getting it wrong. Systems are highly complex, and so there are fundamental issues with measuring the capabilities of individuals to deliver insight into these systems by using methods such as the accumulation of 'Statements of Attainment'



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Specific comments

From my notes I would make the following observations and recommendations:

1. The scope of the environmental market is very large, and the Committee may wish to ponder on what is not related to the environment?
2. Ratification of the Kyoto Protocol would enable Australian entities to join the newly established worldwide trading market in carbon credits,
3. My impression is that the market for environmental staff can be characterised as two poles, with semi-skilled on the one hand, and high-end professionals on the other. Graduates are not being absorbed because the market for professionals is narrow and small, so it is supply-driven. This has kept professional remunerations very low.
4. I was surprised that submissions were not forthcoming from the Tasmanian Government, or the Ecological Society of Australia. Tasmania has specifically focussed on developing the environmental IT sector.
5. The committee and the sector may benefit from commissioning the development of a market sector model,
6. A Commonwealth-funded review of the certification and accreditation of ecological professionals could provide future choice and direction. The review may benefit by giving specific attention on how to cost-effectively select and employ a suite of core accreditation processes, possibly using local and international medical and IT professions as models.
7. Legislation on Environmental reporting could be strengthened to make it mandatory that certain types of reports must have an ISBN. The consequence of this would be that these reports are introduced into an existing and established document archiving chain.
8. The enforcement of environmental reporting agencies could be strengthened through additional people. This could not only be a demonstration of meeting community expectations on public-sector diligence, but would also be an achievable top-down approach to shoring up the benchmark on environmental reporting.
9. The list of species for which data is recorded by Environment Australia could be selectively expanded beyond those which are simply required for legislative compliance.
10. Ecological professionals could be subsidised for undertaking business skills development training, so that there is increased awareness of marketing, etc.
11. Observation repository services are the domain of either NGO's (eg Birds Australia) or government entities (such as museums). There is no commercial observation repository service.
12. There are few environment specific industry classification codes (eg equivalents to Financial, Health, etc).
13. An indirect measure of the market would be a count of the type and number of specialist recruitment agencies.

14. Voluntary work is both a blessing and a curse. The blessings are self-evident, however the negative effects include occupation of the early recruitment stage for young professionals. Lower-rung jobs are filled by volunteers, rather than paid junior professionals.
15. The momentum behind community-based projects has not been migrated from a voluntary endeavour into a commercial endeavour. For example, the Birds Australia Atlas. Maybe individuals from these sorts of organisations could be subsidised or sponsored to attend courses in commercialisation.
16. In my opinion there is little genuine innovation in the Australian environmental sector. Instead, I believe there is an immense amount of inventiveness. What I mean is that we are very inventive when it comes to solving things when resources are limited, but innovation requires gardening ideas from a creative environment which typically requires an abundance of resources (effectively unlimited). I've yet to see that in the environment sector.
17. Professional Indemnity is a massive problem that limits independent professional practice. Consider that a report or recommendation may have the deleterious consequence of environmental damage on a par with a nuclear accident or airline crash. The risks of practice are equivalent to being an obstetrician, on about one-fifth the income (say \$50K versus \$250K).
18. My impression is that the extent of corporate thinking on the environment has been considered mostly as a way to reduce costs, not as a source of increasing revenue.
19. Categories of employment could include:
  - a. Environmental Surveyor (Wildlife auditing)
  - b. Environmental Engineer (Landforming/Built Architecture)
  - c. Environmental Scientist (Physical/Contaminants)
  - d. Environmental Officer (Policy)
20. Most existing certification/accreditation effort appears to have focused on the quality of entities internal processes, rather than the actual outcomes themselves. This is why there is still a trust and confidence issue in EIS's when they are generated by consultants who have ISO certifications.
21. The Aust. Bureau of Statistics could include a question of the quantity of work performed voluntarily within the last year, and one category of work could be environment.
22. One of the main benefits to business in adopting environment-specific policies and thinking is that it builds Goodwill. Goodwill is something that is worth both everything and nothing, but it is something the business community understands, values and can trade on.
23. Useful information and conceptual associations could be found by a commissioned study to 'datamine' the websites and/or databases of any existing environment recruitment services.

24. It would be interesting to consider the replacement cost of voluntary programs, such as StreamWatch or Birds Australia Atlassing project.

Closing remarks

I hope these observations and suggestions help clarify and increase awareness of the role that environmental professionals do and can play in the economy of Australia.

Strategically, I would suggest three priorities:

1. Enforce existing reporting by legislating the requirement for EIS reports to be archived more formally,
2. Identify options for certifying and accrediting environmental professionals beyond higher education training,
3. Ratification of the Kyoto protocol.

I would like to clearly state that these opinions are my own personal opinion, and I make no representations on behalf of any other individual or entity.

Sincerely,

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Director

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