



Murdoch
UNIVERSITY

MURDOCH RESEARCH REPOSITORY

<http://researchrepository.murdoch.edu.au/1583/>

This is the author's final version of the work, as accepted for publication following peer review but without the publisher's layout or pagination.

Morrison-Saunders, A. and Bailey, M. (2009) *Appraising the Role of Relationships Between Regulators and Consultants for Effective EIA*. Environmental Impact Assessment Review, 29 (5). pp. 284-294.

Copyright © 2009 Elsevier Inc.

It is posted here for your personal use. No further distribution is permitted.

Elsevier Editorial System(tm) for Environmental Impact Assessment Review
Manuscript Draft

Manuscript Number: EIR-D-08-00071R1

Title: Appraising the Role of Relationships Between Regulators and Consultants for Effective EIA

Article Type: Full Length Article

Section/Category:

Keywords: EIA; effectiveness; relationships; cooperation; regulators; consultants, Western Australia

Corresponding Author: Professor Angus Morrison-Saunders,

Corresponding Author's Institution:

First Author: Angus Morrison-Saunders

Order of Authors: Angus Morrison-Saunders; Mark Bailey

Manuscript Region of Origin:

Abstract: The role of relationships between regulators and consultants engaged in environmental impact assessment (EIA) is explored. A Partnering Agreement between Western Australia regulators and consultants gave rise to a survey and interviews with representatives of these EIA practitioners to understand levels of cooperation between them and ways to improve EIA practice locally. A mixture of quantitative and qualitative responses are presented with an emphasis on practitioner comments reproduced in their own words and 'voice'. The results suggest that while relationships are strained because of staff resources and levels of expertise brought about by a major resource boom in recent years, there is a great desire for cooperation and collaboration. Greater clarification and understanding of each stakeholders' purpose and role in the EIA process along with opportunities for EIA practitioners to interact, communicate and socialise are identified

as positive ways forward. The value of establishing the relatively simple Partnering Agreement approach is demonstrated and is put forward as something that practitioners internationally might equally benefit from as a means of improving the effectiveness of EIA practice.

1. Introduction

Advice and ingredients for effective environmental impact assessment (EIA) abound in the international literature. These deal mainly with the establishment or operation of regulations and processes along with discussion of desired or intended outcomes. The roles of stakeholders in such processes is generally made clear. However little has been written about the relationships between different stakeholders, especially between EIA regulators (i.e. government agency staff responsible for administering the process) and the consultants working on behalf of the proponents of new development proposals. Hereafter these two stakeholders are referred to as 'EIA practitioners' in order to differentiate them from other stakeholders in the process.

As professionals with similar interests, training and backgrounds EIA regulators and consultants potentially have much in common. But their role in the process is clearly different. Consultants are employed by proponents to advise them on relevant EIA policies, practices and procedures; to assist the proponent in dealing with the administrative aspects of EIA; and to undertake the technical work necessary to assess and mitigate the potential impacts of the proposal (e.g. baseline studies, environmental impact statement (EIS) preparation, response to public submissions etc). The role of EIA regulators is to implement EIA policy and procedures in accordance with the legislative framework (e.g. sign-off on scoping requirements, check EIS quality and authorise publication for public review, verify that public submissions have been adequately responded to etc); they are the gatekeepers for proponents seeking approval of new proposals.

The design and substance of regulations and processes obviously directly affects the role of both regulators and consultants in undertaking EIAs. Thus they will shape the way in which relationships develop in terms of establishing the opportunities or requirements for regulators and consultants to interact. If the regulations for a given EIA process are inadequate, then it may be a challenging and time consuming process to change them because of the need to first obtain political will to do so. By comparison it may be relatively simple to work on relationships - it just requires cooperation between the parties. But what about the nature of those relationships themselves; how important are these for effective EIA practice? And how can EIA practitioners work together to improve the effectiveness of EIA?

This paper arose from an attempt by EIA practitioners working in Western Australia to cooperate on ways to improve EIA efficiency and effectiveness through a *Partnering Agreement*. A number of cooperative activities have been pursued under the auspices of the *Partnering Agreement*, including a formal study based upon surveys and interviews of local regulators and consultants. Whilst the focus of the cooperative activities was principally upon procedural and outcome aspects of the Western Australian EIA process, it led us to think about the importance of relationships with respect to effective EIA. The main purpose of this paper is to share the learning that arose from this study with respect to the relationships between EIA regulators and environmental consultants in Western Australia.

We set the scene by reviewing the international literature in order to extract any messages regarding EIA stakeholder relationships. We introduce the *Partnering Agreement* document itself including its aims and some of the activities it promotes. The methodology for data collection and analysis of a practitioner survey and interviews are presented

followed by some of the results obtained. In the discussion we focus our attention on the results pertaining to the levels of cooperation between regulators and consultants. Finally we offer some reflections on the role of relationships between practitioners in contributing to effective EIA practice.

2. Pathways to effective EIA

Our core interest underpinning this paper concerns how practitioners can work to improve the effectiveness of EIA practices. To understand the practicalities, we first turn to the explanations outlined in the literature of how EIA and other natural resource policy and management tools work. Probably the most well known work in this field to EIA practitioners is that of Culhane et al (1987), Taylor (1984) and Bartlett and Kurian (1999) who posited various models for how EIA works. In synthesis these can be boiled down to processes of:

- external reform – arising from the imposition by regulators of EIA upon the activities of an organisation from the outside which changes the nature and performance of those activities as far as the environment is concerned; and
- internal reform – whereby professionals employed within organisations influence the activities of those organisations.

Because EIA is a *process*, its effectiveness can be viewed in terms of both procedural criteria and substantive outcomes (Sadler 1996, Cashmore et al 2004). Procedural effectiveness can be judged as to whether EIA processes are undertaken according to established expectations while the substantive outcomes refer to the environmental management goals actually delivered once a development proposal has undergone EIA and is implemented. Our ultimate interest is in what practitioners can personally influence or contribute through their engagement in EIA processes that might result in better practice or outcomes.

Mitchel (1989) identifies five institutional factors that influence the procedural aspects of EIA:

- legislation and regulations,
- administrative structures,
- economic and financial arrangements,
- political structures and processes, and
- historical and traditional customs and values.

Ingram et al (1984) discuss similar factors but also add public opinion, the attitudes and preferences of interest groups and the orientation of public officials as important influencing factors.

Mazmanian and Sabatier (1983, p22) distinguish between statutory and non-statutory roles that influence the various stages in policy implementation. The statutory roles are a given for a particular EIA jurisdiction. Practitioners will only rarely have an opportunity to influence these during moments of legislative or procedural review. In Western Australia by way of example such reviews have occurred only every five years or so and legislative change in particular has proved difficult and time consuming to implement requiring the passage of amendment legislation through both houses of Parliament.

The non-statutory roles offer more direct opportunity for practitioner influence. Practitioners have little or no control over socio-economic conditions and technology, public support and

levels of government or political support identified by Mazmanian and Sabatier (1983). However the remaining two non-statutory roles they describe, being:

- attitudes and resources of constituency groups; and
- commitment and leadership skill of implementing officials;

clearly are directly relevant to the activities of practitioners. We provide some further commentary on this in the following section.

In short the point we wish to emphasize is that individuals operating within assessment processes have certain rights or values which they seek to preserve or enhance and that they pursue their interests using the resources they have available within the bounds imposed by the socio-political system (Ingram et al 1984). More recently, Weaver et al (2008) proffer ways in which EIA practitioners can personally push the 'vectors of sustainability' in their day-to-day work. They provide simple but practical examples of how individuals can make a difference to EIA outcomes through pushing the boundaries ever outward towards sustainable development expectations and needs. In terms of the literature discussed previously, these are examples of both internal and external reform mechanisms.

2.1 The roles of regulators and consultants

The literature tends to discuss the role of regulators and that of consultants separately. We briefly summarise the key points and subsequently take up the matter of cooperation between them.

It is clear that the individual activities of regulators can make a difference to the implementation of policy and processes such as EIA. Mazmanian and Sabatier (1983, p34) suggest that the commitment and leadership skills of implementing officials is the factor that most directly affects the policy outputs of implementing agencies. They note that this is a function of the professional norms, personal values, and support for statutory objectives among interest groups and sovereigns in the agencies' political environment. They go on to suggest that commitment to statutory objectives alone will contribute little to their attainment unless implementing officials have and display the necessary leadership skills in using their available resources to that end. We suggest that complementary work of consultants working alongside regulators in EIA can help here too. This notion corresponds with Kingdon's (1995) concept of 'policy entrepreneurs' which includes individuals that extend beyond bureaucratic officials only.

The EIA literature abounds with descriptions of the role of consultants in the process. In particular emphasis is directed to the multi-disciplinary nature of EIA and the need to assemble a dynamic and interdisciplinary team of specialists to undertake the work required (e.g. Fortlage 1990, p65; Erickson 1994, p30; Kreske 1996, p220; Glasson et al 2005, p88). EIA consultants deal with major projects and wide-ranging, often controversial impacts that can involve many participants with different perspectives on the relative merits and impacts of projects. Thus Glasson et al (2005) emphasise that it is important that the EIA process is well managed. With respect to interdisciplinary team work, they suggest that complementarity, comparability and co-ordination are particularly important. Fortlage (1990, p61) notes that the efficiency and tact with which the leader of such a team does their job really does matter and that their personality may make all the difference to the quality of the environmental assessment and the conviction carried by the environmental impact statements (EIS) produced on behalf of their clients. Similarly Erickson (1994, p30) notes that successful EIA depends upon the cooperation and

coordination of individuals within a team of interdisciplinary consultants meaning that it comes down to 'getting things done through people' and not specialities or technical aspects alone.

2.2 Relationships and cooperation between EIA practitioners

The importance of the skills and abilities of individual regulators and consultants with respect to EIA effectiveness is well documented but relatively little has been written about the relationships between them. We found this to be somewhat surprising since EIA has been identified as a way of opening up traditionally closed systems of administrative decision making and promoting cooperation between different institutions and stakeholders involved in the process (Rzeszot 1999, p140). Regulators and consultants clearly will come into frequent contact during an individual assessment as they move through the various stages of proposal referral, screening, scoping, preparation and review of the EIS through to approval decision-making and the issuing of approval conditions and their implementation, so having effective relationships must matter.

Perhaps it is intended that the advice for management of an interdisciplinary team of consultants discussed previously would extend to the relationships with other EIA stakeholders including the regulators. Kreske (1996, p224), for example, states that 'communication is critical for EIS team members to effectively carry out their responsibilities' and goes on to note that communication takes place between 'EIS team members, agencies, other consultants, and service companies'. We could find very little other explicit reference to regulator and consultant relationships. Sometimes this absence came as a surprise. For example the 'Guidelines for Lead IA Professionals' (Boyle 2006) promoted by the International Association for Impact Assessment (IAIA) pick up on the need for effective leadership and knowledge of an EIA process by 'Practitioners' (i.e. consultants) and 'Administrators' (i.e. regulators) alike but do not include any interpersonal or cooperation component.

In the absence of direct guidance, we have extrapolated what we consider to be relevant or even perhaps intended meanings concerning relationships between EIA stakeholders from other aspects of EIA guidance, especially that pertaining to public stakeholder engagement. For example the basic principle of 'Credibility' put forward by IAIA and IEA (1999) that maintains the EIA should be carried out with 'professionalism' and 'fairness' among other things, along with that of 'Participative' meaning that the process 'should provide appropriate opportunities to inform and involve the interested and affected publics' could each be construed to infer some degree of cooperation between different practitioner stakeholders in the process. Similar sentiments can be found in other impact assessment guidance published by IAIA (see: www.iaia.org/) as well as international principles for social impact assessment (Vanclay 2003) and EIA follow-up (Marshall et al 2005).

More explicit commentary comes from Lawrence (2003) in his advocacy for democratic impact assessment processes. He argues that such processes are 'inherently collaborative' (p307) and are about 'people working together in a joint endeavour with substantive aspirations' (p387). Lawrence (2003) is explicitly referring to collaboration between proponents, industry, regulators or specialists with the affected community or public. Nevertheless his observations that the EIA process 'suffers if the knowledge, insights and perspectives of other parties are not fully appreciated and considered' (p307) along with his call for collaboration that is 'inclusive and open, involves multiple perspectives and forms of knowledge, is jointly undertaken by stakeholders, and is

directed toward and guided by substantive environmental management, environmental justice, and sustainability ends' (p387) provides sound guidance for cooperation and relationship building between EIA practitioners. Echoing our sentiment here, at a recent industry forum, Caron (2007) strongly urged regulators to build 'effective relationships with industry, stakeholders and the public'.

Some EIA stakeholders don't necessarily view close working relationships between EIA practitioners as desirable. In a recent legal case in the Federal Court of Australia (*Wilderness Society Inc v The Hon Malcom Turnbull, Minister for the Environment and Water Resources* [2007] FCA 1178) the Wilderness Society argued apprehended bias on the part of the Environment Minister during EIA for a controversial pulp mill project principally because there were substantial discussions and communications between the proponent and the Minister's department. This was dismissed but in the subsequent appeal (*The Wilderness Society Inc v Hon Malcolm Turnbull, Minister for the Environment and Water Resources* [2007] FCAFC 175) the Wilderness Society argued that the Minister had acted with improper purpose, again on the basis of communication between the proponent and the department. While the appeal case similarly was not upheld, this example demonstrates that there are potential socio-political ramifications of relationship building between different EIA stakeholders.

Having established our thesis that the relationships between regulators and consultants are an important consideration for effective EIA, we present the context and methodology of our study followed by our key findings.

3. Study context and methodology

Established by the *Environmental Protection Act* 1986, Western Australia has operated an EIA system that has generally been held in high regard in the international community (Wood and Bailey 1994, Glasson 1999). Key features include an independent Environmental Protection Authority (EPA) that provides advice to the Minister for the Environment on whether development proposals should proceed following the public review process, third party appeals on decisions or advice of the EPA and an overall emphasis on meeting environmental objectives and delivering adaptive environmental management (Morrison-Saunders and Bailey 1999, 2000). The EPA is a five person body (of which four members are part-time) which meets fortnightly to oversee its responsibilities. The day-to-day work necessary for the EPA to conduct all of its EIA responsibilities is carried out by public service employees within the EPA Service Unit (EPASU) of the Department of Environment and Conservation.

In 2005 the EPASU and Environmental Consultants Association Inc (WA) (ECA) entered into a *Partnering Agreement* aimed at improving environmental protection processes in Western Australia by working together to build and sustain professional relations through partnering. Only a few pages in length, the *Partnering Agreement* represents a simple way for the two organisations to collaborate and cooperate. Specifically the purpose of the agreement is to "encourage improved environmental management practice and performance and to facilitate timely and effective assessment". The *Partnering Agreement* is "intended to increase cooperation, shared understanding, consistency, effectiveness and efficiency in the delivery of environmental services under the responsibilities and requirements of Part IV of the Environmental Protection Act". A number of 'communication activities' are laid out in the agreement including opportunities for information dissemination of EPASU information and advice through ECA channels (e.g. newsletters,

website, email communications, seminars), annual workshops and assessment review meetings, environmental assessment training and reciprocal learning opportunities. A small group of ECA members formed a Committee to implement the *Partnering Agreement* initiatives.

3.1 Survey Design

In 2007, the Committee (chaired by the second author) decided to canvass ECA members and EPASU staff along with some other closely associated EIA stakeholders in order to capture key concerns and suggest areas for improvement in relation to EIA practice. The principal author was commissioned to conduct an online questionnaire (hereafter the Survey) and structured interviews (hereafter the Interviews) with representatives from both organisations. Both were carried out in the latter part of 2007.

The *Partnering Agreement* identifies six general areas of Shared Interest (i.e. 'Understanding of project-related science and confidence in the quality of the related environmental management'; 'Cooperation; Managing and communicating change'; 'Certainty of environmental outcomes'; 'Improving the quality of consultant reports'; and 'Enhance the reputation for excellence of the agreement partners') with 3-8 sub points concerning specific aspects of EIA practice under each. These were translated into 49 individual statements for respondents to rate on a six point Likert scale (from Strongly Agree to Strongly Disagree) using an online survey.

Text boxes were provided at the end of each group of questions under a given Shared Interest area so that written 'Comments' could also be received. To put the Survey responses in context, respondents were asked to fill out some basic demographic questions to identify their normal role in and experience with EIA practice in Western Australia.

3.2 Interview Design

A total of 30 EIA practitioners were interviewed comprising 15 experienced consultants and 15 experienced regulator representatives. In selecting consultants to interview an attempt was made to include each of the larger consulting firms in Western Australia (notwithstanding that there are far more than 15 environmental consulting firms operating in the state) and to ensure that a variety of different roles or specialisations were covered (e.g. some consultants specialise in marine work, planning, mining, terrestrial ecology etc). The regulator interviewees comprised staff from the EPASU as well as past and present EPA members and staff from the Office of Appeals Convenor and the Office of the Minister for the Environment.

It should be noted that many EIA practitioners in Western Australia have worked in different roles over the years. For example some consultants have formerly served on the EPA or have worked in the EPASU and vice-versa. The sample size of 30 (subsequently split into two groups of 15) was chosen as an adequate size (within the context of the study budget and timeframe) to be able identify common issues or concerns regarding EIA practice in Western Australia and their solutions.

The rationale for conducting the interviews was to investigate issues more deeply than was possible through the relatively simple quantitative survey. Open-ended questions

were posed relating to the Shared Interests elements of the *Partnering Agreement*. An identical suite of 11 questions covering the six Shared Interests and including an opportunity for interviewees to make any other comments was put to each interviewee in the identical sequence.

3.3 Focus on Relationships and Cooperation

The overall purpose of the *Partnering Agreement* is to foster activities that will build relationships and cooperation between consultants and regulators. All aspects of the survey and interviews were inter-related to some extent and it was not uncommon for survey comments or interview responses to overlap with previously addressed issues. An enormous volume of data was generated overall. In addition to the 49 quantitative survey questions more than 7,000 words of commentary were received while the unedited interview transcripts exceeded 120,000 words. It is not possible to present an analysis of the entire data set in this paper. Hereafter we have especially targeted the questions and/or responses received pertaining specifically to relationships between EIA consultants and regulators (see Table 1).

>Table 1 here>

Table 1 - Interview and Survey Questions Concerning Relationships Between Regulators and Consultants

4. Study Findings

We present the demographic data obtained from the survey followed by the quantitative results collectively (Questions 2-1 to 2-6 in Table 1) and then the qualitative data received (i.e. written comments on the surveys, Question 2-7 in Table 1, combined with interview comments) in relation to the specific questions posed (Questions 1-1 and 1-2 in Table 1). We reproduce the practitioner's comments in their own words; the results thus largely reveal themselves through a kind of 'story-telling' approach.

4.1 Demographic Data

A total of 61 practitioners participated in the online survey comprising 14 (22%) regulators and 47 (78%) consultants. Sample size was sufficient here to enable T tests or two-way ANOVA (simultaneous comparisons between the means) for regulators and consultants against the Likert scale questions and some statistically significant differences were obtained as is discussed later. Gender grouping was reasonably balanced and represent good sample size: 35 males (57%) and 26 females (43%); but no statistically significant differences with the Likert scale questions were found.

Nine consultants (14%) had previously worked in the EPASU and six regulators (9%) had previously worked as consultants) while 23 people (36%) had worked in some 'other' EIA capacity (especially for proponents or government agency stakeholders as well as some academics). This demonstrates the mobility of EIA professionals. No clear patterns emerged here in the data that would permit further useful analysis (and sample size was limited).

The EIA practitioners surveyed were well experienced with 24 (39%) having worked for more than 15 years as an environmental professional, only nine (15%) had worked for less

than five years, and most (34 or 56%) spend 75-100% of their work on EIA activity specifically (all respondents spent some of their work time devoted to EIA activities). Time spent working on EIA was not found to be significant with respect to responses to the quantitative questions.

4.2 Quantitative Results

Communication and cooperation between consultants and EPASU staff was generally considered in high regard as the responses to the initial trio of questions attest (Figure 1). This is a positive finding and suggests that one of the principal aims of the *Partnering Agreement* is being achieved, notwithstanding that it is obviously possible and desirable to further improve relationships between consultants and EPASU staff.

>Figure 1 here>

Quality of cooperation and communication between EPASU staff and consultants (n=61)

For the pair of questions relating to openness to new ideas (Figure 2), consultants were relatively highly rated as being open to alternative ideas and direction from the EPASU (Question 2-4), but the same was not registered for the reverse scenario (Question 2-5). ANOVA testing against respondent's role for both questions were statistically significant (Question 2-4, $p=0.021$; Question 2-5, $p=0.026$) revealing that each of the two stakeholder types consider themselves to be more open to alternative ideas relative to the other group.

>Figure 2 here>

Openness of consultants and EPASU staff to alternative ideas (n=61)

The final question concerning cooperation related to the shared responsibility for achievement of environmental outcomes in EIA practice (Figure 3). There is little sense of shared responsibility for achievement of environmental outcomes between the two groups with a clear majority of respondents disagreeing with the survey question statement. There was no information recorded elsewhere in the survey findings or interviews to shed light on who is perceived to hold the greatest amount of responsibility for environmental outcomes. In a Western Australian context we find these results interesting because the objectives for EIA clearly make environmental protection the responsibility of the proponent (represented by the consultant in this study) but the environmental performance standards to be obtained are the responsibility of the EPA (represented by the EPASU in this study). We had anticipated that both practitioners might assume equal responsibility for achievement of environmental outcomes, but obviously there are other factors at play here. This may be an area worthy of future investigation both locally and internationally.

>Figure 3 here>

Responsibility for achievement of environmental outcomes (n=61)

4.3 Qualitative Responses

The qualitative responses are grouped here according to common themes that emerged in the comments we received. We present them in their original 'voice' as this helps convey the passion of EIA practitioners for the issues.

4.3.1 Staffing Issues

Following is a sample of comments concerning the staffing situation within the EPASU. The main concern was the high turnover of staff within the department with the consequence that a high proportion of current staff is newer, younger and less experienced than has been the case in the past. The perceived impact of this on EIA performance within the EPASU is loss of judgement (e.g. with respect to understanding and application of science and related environmental management) in EIA, replaced by increased reliance on following due process. For some too, the increase in what was perceived as prescriptive measures as contained in the relatively recent publication of EPA Position Statements and Guidance Statements (see Waldeck et al 2003) was seen to contribute to a more 'process driven' approach to EIA, rather than one based on informed judgement and decisiveness.

The [EPASU] are under resourced as well and ... I think they are tending to follow the rule book at the moment rather than necessarily thinking beyond the square. ... Many consultants are more experienced than young officers within the government agencies.

When the junior officers are unsure of a potential environmental impact, they get wary, they don't know enough about the subject to provide a balanced answer, so they tend to just ask for a lot more than perhaps the more experienced person would.

What's happening in environmental management is that it has probably become more prescriptive. We have gone backwards in that sense ... because the requirements of the EPA and the reading of those requirements by officers within the [EPASU], have been one towards prescription of environmental outcomes ... I think we have removed innovation that was offered previously by both the consultant and indeed, by the project owner. ... We have got a lot of people in the [EPASU] who are ticking boxes.

My general experience is that officers in the EPASU are under a very heavy burden and that for that reason, they generally are difficult to access, and they find it problematic to spend much time with consultants, equally, I think consultants and their clients sometimes misunderstand the role of the assessing officers, expecting them to be free consultants.

It was not just the regulator that was identified concerning staffing problems as the following comments demonstrate.

Many of the consultancies it is clear are using very new staff, and in some cases there is a problem with adequate quality control of documents that we are receiving. Even some of the larger consultancies are having that problem.

EPASU staff often have to deal with consultant's lack of understanding.

There appear to be numbers of inexperienced consultants, perhaps fresh from university, who cannot write and who do not understand their topic. This is a manifestation of the shortage of people across the board of properly qualified personnel which the current rush to develop has brought on.

In recent years the state of Western Australia has experienced an unprecedented resource boom largely associated with the economic and industrial development of China. This was frequently considered to contribute to the staffing shortage issues and its subsequent effect on EIA practice.

What is in the front of my mind at the moment, ... is the resource boom that's going on. There are corners being cut all over the place...

...standards are being compromised by the "boom", too much development too fast.

It is the boom making things so hurried, clients so impatient to get stuff done, the sheer volume of work that the few people that have decent scientific capabilities and the people who are managing the projects, on overview they are just too swamped half the time to do it as well as it should be done.

Evidence of the pressures arising from the economic boom conditions on resources can be found in successive annual reports of the EPA concerning EIA practice and their operating budget. In 2003-2004 there was a 20% increase in the number of proposals referred to the EPA for screening, a further 25% increase in 2005-2006 and further slight increases the following year (EPA 2004, 2006, 2007). The number of new development proposals subsequently subject to formal EIA each year also increased in this time frame and yet there were no corresponding increases in budget allocation – the EPA's annual budget for 2006-2007 being identical to that of 2002-2003 and was it actually less in the intervening years (EPA 2007, p65). The problems of an increased EIA workload relative to budget is compounded when staff turnover is also factored in. In large part this appears to be because of staff take-up by major resource companies operating in the state. Anecdotal comments from some of our international colleagues suggest that other countries may also be experiencing similar phenomena. The consequences of all this for EIA practice in Western Australia largely revolve around capacity to keep up with demand for approvals as well as issues of quality of those assessments. There are also implications for EIA practitioner relationships.

4.3.2 Effect of Resourcing on Cooperation Between Regulators and Consultants

Many of the tensions and issues identified in previous comments are linked to how current levels of cooperation between consultants and EPASU are perceived. First and foremost among these concerns was the EPASU staffing resources combined with the consequences of the economic boom conditions. It was perceived that EPASU staff are not available for meetings. Consultants would generally prefer to have more meetings with EPASU staff than they currently are able to. Notwithstanding these perceived difficulties, most interviewees suggested that there was good intent for cooperation. This perception both reinforces and is reinforced by the overall spirit of the *Partnering Agreement*.

I think, to be fair to the EPASU they are really under resourced and they are struggling to keep their staff and most importantly, senior staff it appears. ... There has been a constant, constant progression of people leaving the Department and I guess that comes down fundamentally to pay. But regardless of all of that I think the relationship is good.

It can sometimes be difficult to get meeting times with EPASU staff ... When meetings are finally organised they have shown to be very constructive and useful.

There is an issue associated with the boom times that the demand on the system for people with expertise is such that the demand exceeds the capacity of middle level people to do it so we have got lots of people inside Government and inside consulting and inside everywhere really in industry, who struggle. I don't see any problems with the relationship side of it, but I just think the ask on people is bigger than their capacity to supply.

It is becoming increasingly difficult to maintain useful dialogue between consultants and EPASU staff. Professional respect is being challenged on both sides by shortage of suitably qualified and experienced staff.

The biggest hurdle with a cooperative arrangement seems to be the amount of resources the Department has to allocate. Often we find it very difficult to get hold of people in [the EPASU] because they are so busy. We would like to have more cooperation from them and we think they want to cooperate, but it is very hard to in fact get hold of them.

I think the intention is there for better cooperation and by the time you actually get down and talk and have a meeting and discuss issues, I have never had problems where you don't feel like the parties are trying to cooperate. I think the main dilemma that occurs at the moment is trying to get that process in place.

While many consultants indicated frustration that they could not meet with EPASU staff as often as they would like, at least one complained that they have been expected to participate in too many meetings. Some EPASU staff felt as though some meetings were unnecessary and a waste of their time.

I really feel that some consultants request to come in and have a meeting and bring their clients, just so they can bill their clients. There is nothing else that comes from those meetings that can't have been done with either a one line email or has already been said.

4.3.3 Effect of Resourcing on EIA Practices

The consequences of the perceived staff shortages within EPASU combined with relatively inexperienced staff is two-fold. Firstly, there is a tendency to emphasise procedures; in this case, a tendency to rely on written communication and document review rather than face-to-face meetings to resolve things. Secondly concerns were raised that the senior staff of the EPASU (who were almost unanimously held in very high regard by all interviewees) have been put under increasing pressure to cope with the extra workload that arises. In part this is because decisions that consultants expect junior officers to make get 'passed up the line'. Also, though, long-term WA consultants have well established relationships with the senior staff and willingly seek them out for meetings to resolve matters expeditiously.

Whenever we talk to them it is always go away and do something, you know, write up something and get back to us when we have got something to critique saying that they can never get involved in a process or even be proactive and pull their thoughts together on a particular impact. It is always you go away and do something and then we will come into it.

Their response routinely to the staff here is just prepare your documentation and submit it, we will review it and then we will talk about it...

I think the senior people in the organization are absolute keys.... I think without those senior people it would be impossible to get through the junior staff because things are just locked up because of conservatism, which you can understand – when you don't have the experience or the confidence or the knowledge of a client or a proponent, then you are going to be overly conservative and it makes it incredibly hard to get your projects through. So the senior people are keys, they need to be protected because they bring the common sense to the whole process.

Because of the pace of work and because of the high turnover in the regulators, we are losing experienced people to industry and they are being replaced by junior people who are still finding their feet and also are more process orientated and less willing to use common sense or to take risk.... I found that in areas where there has been a dispute and we had been able to arrange a meeting with senior personnel... at that level cooperation is very good.

There was great concern that any further erosion of senior or experienced staff within the EPASU will result in total collapse of the system. There was recognition that responsibility

needs to be taken by consultants and the ECA to resolve this situation notwithstanding that the staffing capacity of the EPASU is a state government responsibility.

... you can't afford to lose [senior EPASU] people ... and the accumulated wisdom that is there. ... You and I are having to think laterally and positively about keeping [that] brain power.

I think a lot of it comes down to the senior people are under so much pressure that they don't have the time to develop the young people. So, it is a lack of resources and I would support more staff, more quality staff. At the moment they are losing a lot of their quality staff because of the resource boom, because of money. ... so our future leaders are basically jumping out of the Government process.

We really have to get down and get better agreement and get a better process. There are some people in the EPASU and you think, oh, do I really have to ring him, because I know what the answer is going to be, I know it is going to be, 'come back in four weeks' time', or 'no you can't'. And I know that he doesn't really know what he is talking about. I can give examples of several instances where you have rung someone up and they are abusive and frighten the shit out of you and they have been totally wrong, but what are you supposed to do? There is no one to go to unless you go to [the senior EPASU staff], and they must be absolutely sick of us going to them, because they are about the [only] reasonable people in there. So if they don't do something soon, the system is going to break. It is going to break for two reasons: (i) because there are so many big projects going through and (ii) because there is nobody left in the EPASU that can really do the work.

4.3.4 Effect of Values Differences

There was frequently a perception that the values base of EPASU staff are different to that of consultants and that this affects EIA practice. This was also indirectly apparent in terms of the 'them and us' feeling that often emerges from the interview transcripts when taken overall – the EPASU staff and consultants each clearly identify as separate stakeholders in the EIA process. Tensions between the two groups appear to arise from differences in values, expectations and motivations for participating in EIA. For example, some interviewees perceived that the expectations of the EPA with respect to quality science and environmental management have increased in recent years or are different to those of consultants and that this had led to conflict between the two stakeholder groups. The challenge therefore is to craft an EIA process that either overcomes these differences (e.g. through communication and relationship building) or else unites the two stakeholder groups by providing an alternative purpose for engagement in EIA in the first place.

More open debate on the major issues would help to clarify the thinking on both sides.

I suppose one of the problems that I find with some of the regulatory staff is if the science doesn't give them the outcomes they want, they will tend to fall back more on a philosophical view point, so I find that, yeah, essentially there are some people there who have got fairly green philosophical view points and that can sometimes drive an agenda rather than the science and that's probably one of the main problems.

...the regulator's people don't have a lot of practical experience and so, in my terminology, they tend to be very dark green and impractical about some of their approaches and suggestions.

An awful lot depends on the nature of the project. If it is a project that the regulators clearly are uneasy with because of their philosophical approach, if it is a contentious project and that very clearly it is happening in an area that it should not be happening in, then the shutters go up to some extent, and they can tend to make things difficult.

I have encountered a distinct lack of cooperation on projects that EPASU doesn't like. There should be a concerted effort ... to obtain a common ground...

... how people communicate with each other becomes critical, ... cooperation ... is very good, but it could be improved by an awareness of where other people are coming from.

I do feel that sometimes there is the real potential for conflict between those different sets of goals and I do also understand that there are a lot of consultants out there who are very, very ethical, very environmentally focused and they are doing a difficult job within the scope of the project that they are working on. I generally can tell the people who are interested in getting a good outcome within that small scope versus people that just want to get the job done. I guess I am more willing to engage with people who do understand the bigger process and understand that perhaps there are some different kind of goals operating in the same room. So that's outside-in, and the other part was inside-out. I think that there is the ability for at times the EPASU to get a bit self righteous about the work that we do. So, if the consultants can't deliver to us in the form that we require, then we can't really be stuffed.

Consultants are not ethical because of the pressure they are always under and the culture that develops as a result of the competitive tendering system.

...it is recognised that occasionally some clients and consultants do not act ethically, however there is a clear mechanism to redress this through the ECA charter and that trust must underpin all dealings.

4.3.5 Status of Relationships Between Regulators and Consultants

Clearly, cooperation in EIA is not solely the responsibility of the EPASU staff. Some interviewees noted that consultants bring a lot to the relationship while others noted the role of other stakeholders in the EIA process too, especially that of proponents. One interviewee noted a tendency for the poorer quality consultants to bully EPASU staff but suspected that that was a consequence of the pressure being placed upon consultants by their clients to expedite EIA approvals. The extent to which proponents choose to engage in the EIA process also affected relationships between their consultants and the EPASU staff.

I would say it is often poor and it suffers from the common syndrome of 'us and them' where I don't know whether it is a natural tribal instinct where you like to group together and feel like you belong in a group by criticising those who are outside the group, but that certainly is a tendency.

Again, really varied and it really depends on the consultant. So, there are consultants in here whose name is mud. And when the reports come in, myself and others would like to put them straight in the bin because we know they are going to be crap. So that's not a very good relationship.

There a lot of consultants and a lot of EPA staff and the relationships, like all relationships are based on people and you probably find that some consultants get on well with some EPA people and vice versa and others don't. But it is not as simple as the relationship between ECA and EPA. Again it depends entirely on who the proponent is and how the proponent chooses to engage. If the proponent is hands-off then OK your relationship is with the consultant.

.. the relationship between the EPASU and consultants would benefit from more communication.

With the good consultants the relationships tend to be very good. The poor consultants have a tendency to bully EPASU staff ... I was very surprised by the level of bullying though and I think that also on the other side of the fence, the consultancy sector, they are under pressure from their clients and they are feeling it and they are also expressing their frustrations with people in EPASU. Frankly, all of them need to sit back and say, 'look, we are all in the same boat and perhaps if we were actually nicer to each other...' I think that industry and the consulting sector have actually gotten away with behaving quite poorly over time. Now again, not all of them. Some of them are really good operators and I would hate that comment to be taken across the board, but some of them need a bloody bullet actually.

Given the system is under stress, I think it is fair to say that the relationships between high quality consultants, quality proponents and the appropriate people in the EPASU is as professional as ever. When, however, the proponents and the consultants put in material that is less than that required in terms of quality, I think it is fair to say the EPASU is, because of the stress it is under, inclined to be harping and carping and get personal at times, and vice versa by the way. In other words, when the EPASU demands re-work to bring the work up to a suitable quality, I think it is fair to say that there is now a sense of animosity going between the two parties.

... political issues too often produce adversarial situations. At the other extreme, consultants' clients often see unhealthily close relationships between consultants and EPASU staff.

4.3.6 Comments About the Value of the Partnering Agreement

Most participants considered the *Partnering Agreement* to be an important initiative for fostering cooperation between the ECA and EPASU and for working together to improve EIA practice in the state. A two day residential EIA training course implemented under the terms of the *Partnering Agreement* in 2006 and repeated each year since then was strongly supported. Suggestions for the future included further collaborative meetings and events between the two groups and also involving other EIA stakeholders too. The ECA was identified as being the appropriate body to take the initiative here. This extended into the concept of the ECA preparing guidance documents for consultants, an interesting alternative approach to relying on the EPASU to take this role.

The opportunities for improving partnerships, activities and relationships is in front of us - to date there has not been a lot of work in this field (excepting the training and Partnering Agreement - which is a fantastic step forward).

The training programme needs to continue. I think that should be an annual event because the turnover of staff is so great that there are always new people, but also it is the one opportunity for the type of interaction we talked about earlier in terms of learning from the past and passing that on from the old silverbacks to the youngsters.

I guess in the spirit of signing an agreement and the role of consultants and EPA, what we are doing at the moment is joint training which certainly has to be a positive – the positives that come out of that is that we seem to be working together, but it establishes contact. We have consultants and regulators at these shows so you immediately get some contacts. Maybe the opportunity to improve the informal contact between consultants and the EPA ought to be chased up, because so often the contact is formal ... Anything that the ECA can do to develop a more collaborative relationship with the EPASU rather than an antagonistic relationship would have to be positive I would have thought. The only way we can do that is to get to know people ... Young [EPASU] officers have got to develop trust with older consultants as well.

I just think more exposure to each other – that's got to be good... I think that the opportunity to meet them like at the [EIA training course] type of thing is fantastic... Maybe like the ECA conference seminar workshop – maybe they should send 8 free tickets or 10 free tickets to the EPASU so that they can bring people along and have them mingle – I don't know if they would do that or not. ... I really liked ... a forum on Exmouth ... because it was across the board ... Because it wasn't marketed as being confrontational – it was talking about the science, not particular projects, so maybe some of those. I know ECA does do it with their meetings and things like that, I have got no idea how many [EPASU] people come to all of those, if they do or if they don't... Maybe some 'how to do it' type of documents coming from ECA.

I do believe that there is a procedure in [the Partnering Agreement] which none of us has ever, to my knowledge, has ever taken up which is the look backward/forward process and that process which was written up and was intended to be one where we did go in and have individual meetings with the EPASU to really look at process, try and remove the personalities from them in part by stepping it up ... Basically to sit down and say 'this process really went well, why did it go so well'? Or 'this one was a pain in the arse and a source of frustration to everybody involved, why was it the case? What would we do to do it better next time'? Basically ... what are the agenda items that are OK and what lessons learnt should we take out to the EPASU in general and the consultants in general. We have never taken up on that one.

You really have to get communication going. We really have to sit down around a table and see it from both sides of the fence, which we are not doing. I don't see evidence of that.

Wouldn't it be great to go and learn what's going on, on the other side, to have some sort of secondment or exchange situation where we can go and engage with people? I think it is pretty easy to get into the ... 'them and us' scenario when you think that the 'thems' are just ringing you up and hassling you out all the time – it would be interesting to have a different level of exchange.

There is more to good EIA practice than just the consultants and the EPA vehicle. There is a lot of Government authorities and a lot of Government officers out there, including in the [EPASU], that aren't involved in the process outside their day to day work. ... I would say that the exclusion of everybody other than the EPASA and the ECA in this type of process is not to the benefit of good [impact assessment] if you know what I mean.

4.3.7 Ways to Improve EIA Practice Through Partnership

In reflecting on the value and future of the *Partnering Agreement*, some interviewees came up with suggested ways forward to improve EIA practice. These comments are the sorts of outcomes that might be expected from 'policy entrepreneurs' mentioned in the international literature discussed previously.

I would like to think that the people who are sufficiently close to it to understand it are those two groups in the Partnership and I would like to think that that group could be involved in the questions associated with priorities over comprehensive, environmental and social and economic objectives, over legal and coercive [powers], all of those sorts of things ... Both groups between them represent significant stakeholders who I think should be putting in a concerted effort at directing which way the system goes.

I think that the standard does need to be a little bit higher and I think that the [EPA] Chairman has a lot to do about where that level is drawn. So, it will be interesting to see. Just whether and when they are prepared to send things back and say, 'actually I won't release this [EIS] because it is still crap', even though there are millions of dollars at stake and people are really pushing and the political power is on – to still say 'no, it is still not acceptable'.

What I would love to see is up front on a project that we agree to some net environmental benefits. Invariably what we see is we just chew up funds, we chew up time, effort, energy through a bureaucratic process at times when, if we focused on the net benefit of the whole project, we could save so much money and really have some great outcomes for the State.... But we should be looking at a total net project cost that goes to an environmental good... But this breaking projects down into inordinate detail and effort, frustrates me. There is no other way to describe it. I think up front I would love to see regulators, the project, the client all together in one room [and determine that] 'This is the value of the project, therefore we are looking to spent X percent on environmental management'.

The majority of consultants and EPASU staff appear to work to a high standard. Sometimes they can both be seen to be working more in the favour of the client or the proponent than in the favour of the highest and best environmental outcomes.

I think the key is what you are actually trying to achieve, which is a partnering agreement. ... Today, it is almost an adversarial role – adversarial is not quite the right word, but there is not an openness or necessarily willingness to help. It is a bit like I said before, 'you have got this problem, go and fix it'. It is not like: 'how can we work through this problem together and find a solution?'. ... I think, for me, that's probably the key area where we don't find some of the EPASU people particularly helpful in terms of providing solutions. They are very quick to identify the faults and the issues, which if truth be known, we have identified, but not so ready to help solve it. I see the partnering as more trying to open up the communication channels and have more of a two way open street.

These qualitative results using the voice of the study participants demonstrate a great deal of passion for and concern about EIA practice in Western Australia. It is clear that a great deal comes down to the relationships between practitioners. We offer some concluding comments and ways forward for all EIA practitioners world-wide in the closing section.

5. Conclusion

At the outset of this paper we posed two questions: How important are the relationships between regulators and consultants for effective EIA practice?; and How can EIA practitioners work together to improve the effectiveness of EIA?; which we attempt to answer here. We have drawn the following conclusions and suggestions for international practitioners based on our experience with the *Partnering Agreement* between the EPASU and ECA.

As identified in the literature, practitioners have an important role to play in delivering effective EIA. This study has demonstrated value in exploring the role of relationships between regulators and consultants in achieving this. Both the Survey and Interview results show a high level of willingness by EIA practitioners to cooperate and work together to improve both working relationships and EIA practice in Western Australia.

From our study it is apparent that consultants would benefit from a formal clarification of the values of the EPA and the EPASU with respect to their role in and purpose for undertaking EIA, and vice-versa. In terms of documentation, this could be achieved by incorporating appropriate text into the *Partnering Agreement* itself, however, a process of dialogue between the stakeholder groups would also be valuable. It could also be featured in staff training programmes for both regulators and consultants. This is one route to enhancing the effectiveness of EIA practice.

It is clear that the EIA regulators in Western Australia are under-resourced and suffering from staff shortages and loss of experienced staff, hampering their ability to carry out EIA functions to the levels expected by consultants and other EIA stakeholders. Any further erosion of staffing and resources of the EPASU may lead to the collapse of the system in the near future, with adverse consequences for industry, consultant and public stakeholders alike. In the interests of maintaining standards of EIA practice in WA, the capacity of the EIA regulator must be enhanced. While this is ultimately a Government responsibility, in the spirit of the *Partnering Agreement*, anything that consultants can do to support and enhance the capacity of the EPASU will be valuable for EIA practice. For example it may be appropriate for the ECA to take a more active role in education and staff training, information sharing and dissemination of EIA guidance advice.

Overall we consider the *Partnering Agreement* approach to be a positive initiative. It appears to be an effective mechanism for regulators and consultants to work together to find ways to improve EIA practice. It is a relatively simple and effective approach that can easily be adopted. There are no legal or financial impediments to such an approach. It simply requires some cooperation between regulator and consultant leaders to initiate, and thereafter helps to build cooperation between all levels of EIA practitioners. Naturally it might be beneficial to also include other EIA stakeholders in such a partnership agreement.

It is clear that the Western Australian practitioners have especially benefited from EIA training courses, seminars and other events implemented under the auspices of the *Partnering Agreement* that provide opportunities for regulators and consultants to mix and socialise together. Practitioners are keen to further develop collaborative interaction, for example, structured workshops or round-table meetings aimed at sharing lessons learned and working on ways to improve EIA practices. Based on these positive experiences in Western Australia we suggest that EIA practitioners in other jurisdictions worldwide may benefit from this type of cooperative approach to improving EIA practice.

6 References

- Bartlett, R. V. and Kurian, P. A. (1999) The Theory of Environmental Impact Assessment: Implicit Models of Policy Making *Policy and Politics* 27, 415-434
- Boyle J 2006 Guidelines for Lead IA Professionals, International Association for Impact Assessment, available:
www.iaia.org/modx/assets/files/CC1%20Guidelines%20Lead%20Professionals.pdf
[accessed 8 July 2008]
- Caron G 2007 'Government-Industry Relationships: More Critical Now Than Ever Before', *Alaska Oil and Gas Symposium* 17 September 2007, National Energy Board, Canada, available: <http://www.neb.gc.ca/clf-nsi/rpblctn/spchsndprsnttn/2007/lskcnfrnc/lskcnfrnc-eng.html> [accessed 8 July 2008]
- Cashmore, M, R Gwilliam, R Morgan, D Cobb and A Bond (2004), The Interminable Issue of Effectiveness: Substantive Purposes, Outcomes and Research Challenges in the Advancement of Environmental Impact Assessment Theory, *Impact Assessment and Project Appraisal*, 22(4):295-310.
- Culhane, P.J., Friesema, H.P. and Beecher, J.A., 1987, *Forecasts and Environmental Decision-Making: The Content and Predictive Accuracy of Environmental Impact Statements*. Westview Press, Boulder, Colorado, USA.
- Environmental Protection Authority [EPA] 2004 *Environmental Protection Authority Annual Report 2003-2004*, EPA, Perth, available:

- <http://www.epa.wa.gov.au/template.asp?ID=11&area=Profile&Cat=Annual+Reports>
[accessed 8 July 2008]
- Environmental Protection Authority [EPA] 2006 *Environmental Protection Authority Annual Report 2005-2006*, EPA, Perth, available:
<http://www.epa.wa.gov.au/template.asp?ID=11&area=Profile&Cat=Annual+Reports>
[accessed 8 July 2008]
- Environmental Protection Authority [EPA] 2007 *Environmental Protection Authority Annual Report 2006-2007*, EPA, Perth, available:
<http://www.epa.wa.gov.au/template.asp?ID=11&area=Profile&Cat=Annual+Reports>
[accessed 8 July 2008]
- Erickson, P. (1994). *A Practical Guide to Environmental Impact Assessment*. Academic Press, San Diego.
- Fortlage CA 1990, *Environmental Assessment: A Practical Guide*, Gower Technical, Aldershot, England
- Glasson, J. (1999). 'Environmental Impact Assessment - Impact on Decisions'. In: J. Petts (ed). *Handbook of Environmental Impact Assessment Volume 1 Environmental Impact Assessment: Process, Methods and Potential* Blackwell Science Ltd 121-144
- Ingram HM, DE Mann, GD Weatherford and HJ Cortner 1984 Guidelines for Improved Institutional Analysis in Water Resources Planning, *Water Resources Research*, **20**(3):323-334.
- International Association for Impact Assessment and Institute of Environmental Assessment [IAIA & IEA] 1999. *Principles of Environmental Impact Assessment Best Practice*, IAIA, available:
http://www.iaia.org/modx/assets/files/Principles%20of%20IA_web.pdf [accessed 8 July 2008]
- Kingdon JW 1995 *Agendas, Alternatives, and Public Policies* (2nd ed.). HarperCollins Public Publishers, New York.
- Kreske DL 1996 *Environmental Impact Statements: A Practical Guide for Agencies, Citizens, and Consultants*. John Wiley & Sons, New York.
- Lawrence D 2003. *Environmental Impact Assessment: Practical Solutions to Recurrent Problems*, John Wiley & Sons, Hoboken
- Mazmanian DA and PA Sabatier 1983. *Implementation and Public Policy*, Scott, Foresmann and Company, Illinois, US, 299pp.
- Marshall, R, J Arts and A Morrison-Saunders (2005) International Principles for Best Practice EIA Follow-up, *Impact Assessment and Project Appraisal*, **23**(3): 175-181
- Morrison-Saunders, A. and J. Bailey 1999. Exploring the EIA/Environmental Management Relationship. *Environmental Management*. **24**:3, 281-295.
- Morrison-Saunders, A. and J. Bailey 2000. Transparency in EIA Decision-Making: Recent Developments in Western Australia. *Impact Assessment and Project Appraisal*, **18**(4), 260-270
- Rzeszot, U 1999 EIA in Central and Eastern Europe, in: J Petts (ed) *Handbook of Environmental Impact Assessment Volume 2, Environmental Impact Assessment in Practice: Impact and Limitations* Chapter 7, Blackwell Science Ltd, Oxford, pp123-142
- Sadler, B., 1996, *International Study of the Effectiveness of Environmental Assessment, Final Report, Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance*. Canadian Environmental Assessment Agency and the International Association for Impact Assessment, Minister of Supply and Services, Canada.
- Taylor, S., 1984, *Making Bureaucracies Think*. Stanford University Press, Stanford, USA.
- Vanclay, F 2003. International Principles for Social Impact Assessment, *Impact Assessment and Project Appraisal*, **21**(1): 5-11

- Waldeck, S., A. Morrison-Saunders and D. Annandale (2003). Effectiveness of Non-legal EIA Guidance from the Perspective of Consultants in Western Australia, *Impact Assessment and Project Appraisal* **21**(3), 251-256
- Weaver, A., J Pope, A Morrison-Saunders and P Lochner 2008, Contributing to sustainability as an Environmental Impact Assessment practitioner, *Impact Assessment and Project Appraisal*, **26**(2): 91-98
- Wood, C. and Bailey, J., 1994, Predominance and Independence in Environmental Impact Assessment: The Western Australian Model. *Environmental Impact Assessment Review* **14**, 37-59.

Table 1 - Interview and Survey Questions Concerning Relationships Between Regulators and Consultants

1 Interview Questions

1-1 Cooperation: *How effective or 'healthy' are the current levels of cooperation between environmental consultants (and their clients) with EPASU staff and vice versa?*

1-2 Other comments – Enhancing EIA practice in WA: *Do you have any other comments about how EIA practice in WA could be enhanced (in the context of the Partnering Agreement)?*

2 Survey Questions: Cooperation

2-1 Dealings between consultants and EPASU staff are undertaken with a high level of professional respect for each other.

2-2 Communications between EPASU staff and consultants are constructive.

2-3 Communications between EPASU staff and consultants are transparent.

2-4 Consultants are open to alternative ideas and direction from the EPASU.

2-5 EPASU staff are open to alternative ideas and direction from consultants.

2-6 Consultants and EPASU staff equally share responsibility for achievement of environmental outcomes.

2-7 Comments (on any aspect of Cooperation) ...

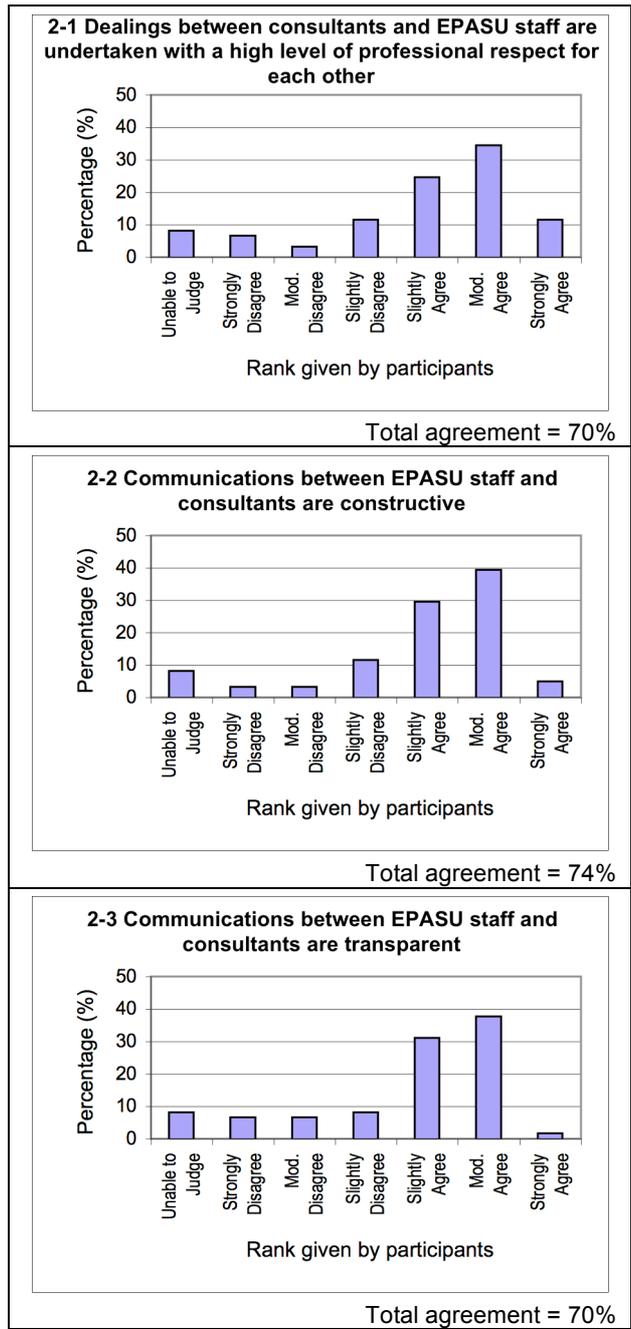


Figure 1 Quality of cooperation and communication between EPASU staff and consultants (n=61)

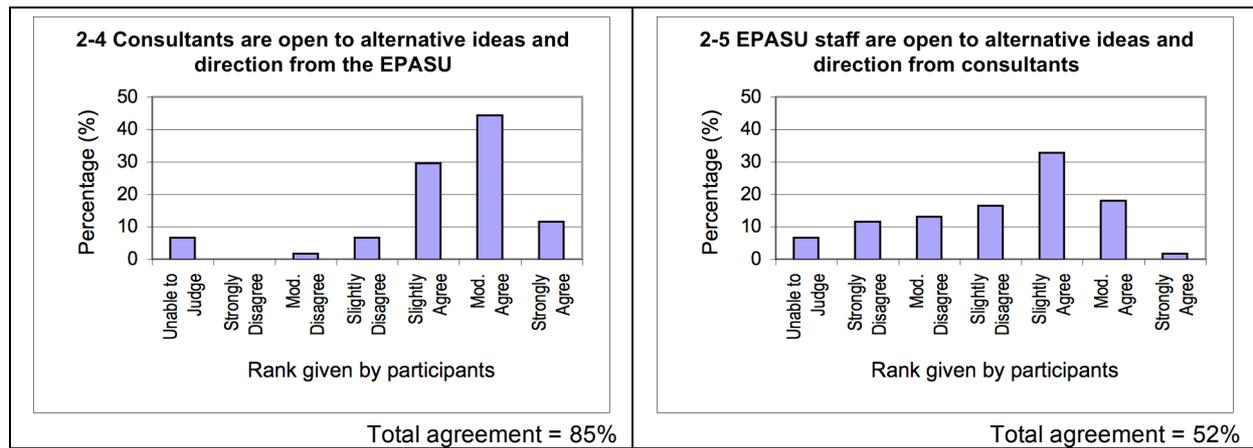


Figure 2 Openness of consultants and EPASU staff to alternative ideas (n=61)

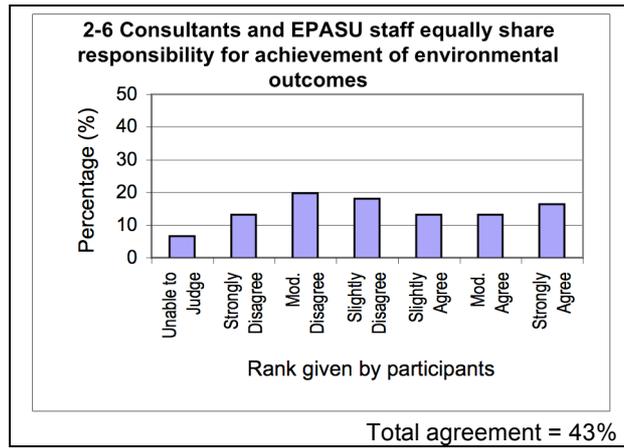


Figure 3 Responsibility for achievement of environmental outcomes (n=61)