What is Community Based Auditing and How Does it Work?¹⁵

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Abstract

The paper discusses the origins, philosophy and central methodology of Community Based Auditing (CBA).

CBA is an experiential tool for empowering citizens to undertake disciplined inquiry into issues relating to natural resource planning and management.

In making a case for CBA, the author argues that the now serious discontent and conflict surrounding natural resource management in Tasmania are the result of numerous instances where management decisions have led to adverse environmental and social outcomes. The author argues that such outcomes are in fact symptoms of a more serious problem once solved could lead to reduced conflict and a better way forward. It is argued that the notion of certainty embedded in present frameworks underpinning government legislation, natural resource planning and management has led to unrealistic expectations on the part of industry, government and the community. For instance, there is the expectation that resource planning and management systems can and should deliver outcomes that are risk free. Numerous CBA audits have shown conclusively that such assumptions are wrong.

The author argues that decision-making frameworks need to be redesigned to include provision for those cases where the facts are uncertain. While the author sees Post Normal Science as one way to achieve this (through its use of expanded per review processes), he believes that this is still a distant hope in the Tasmanian context. CBA is therefore proposed as a rational process that could take us toward the adoption of such participative strategies by tackling the way in which the concept of certainty is used.

¹⁵ This paper is an expanded version of a talk presented at the Futures Conference held in Launceston Tasmania on August 25, 2007.

Introduction

What is Community Based Auditing

Community Based Auditing (CBA) is essentially an experiential tool for empowering citizens to undertake their own disciplined inquiry into natural resource issues affecting them either directly or through their role as taxpaying stakeholders. CBA has arisen in answer to the concerns of increasing numbers of citizens who seek direct input into resource planning and management. Much of the time citizens find themselves on the outside of such process and given only limited opportunity to play an active role in decision-making.

By taking the view that citizens are 'experts in their own locale', CBA creates a space where citizens can work together to develop their skills and confidence.

CBA is about citizens generating valid knowledge using inquiry processes they themselves design and implement. Although still evolving, Community Based Auditing serves as a good example of how citizens can be effective managers of change. In that sense, CBA should be seen as 'work in progress'.

To date some 14 audits have been completed, directly involving nearly 200 people. This paper is an attempt to explain the approach as well as locate it in the broad church of community based change strategies.

For ease of presentation, the paper is divided into 2 parts. Part A discusses the origin and development of CBA between 1999 and 2003 and Part B discusses the development from 2003 to 2007 during which time the philosophy, methodology and central methods had more fully developed.

PART A: The Origin and Initial Development of CBA 1999 to 2003

The origins of CBA

The emergence of CBA is based on a 25-year gestation period, during which I wrestled with the problems of community advocacy and participation. The initial idea came to me in 1998 and further developed as a result of a fortuitous meeting of like minds during 2000.

Tasmanian Community Resource Auditors Inc. (TCRA) was formed in early in 2000 by a group of scientists and activists, in response to long running concerns at the way the views and opinions of communities across Tasmania appeared to be dismissed by industry and all levels of government.

While each member brought unique experiences and expertise to the group, there was a common concern that stood out from the myriad of natural resource issues we had dealt with over a collective period of some 80 years. The focus of the concern was the way in which citizens were being treated by industry and government. It was clear to us that citizens were somehow left out of key decision-making processes.

Our experiences were rich with examples where communities were asked for 'feedback' and 'input', but seldom if ever involved in strategic decision making. When citizens attempted to assert their arguments a range of ploys were used to shut down or divert debate.

We all recalled instances where industry and government referred to community members 'as non-experts' or 'lay persons', inferring those citizens would find it difficult understand complex matters. More extreme examples included situations where governments stepped in and changed the law when community expectations differed from the direction that government and industry wanted to go¹⁶.

Further discussion and reflection by the TCRA board members revealed that concerned citizens were treated in one or all of the following ways:

1. Outright dismissal of citizen's concerns by institutions and authorities;

2. Citizens given the run around from institution to institution or department to department resulting in burnout and frustration on the part of the affected citizen;

3. Citizens expected to 'prove' their concerns. This was evident in several cases and was a ploy often used to put the onus back onto the citizen, although in some cases it was clear that the government/industry did have a case to answer and owed a duty of care to the community;

¹⁶ The latest being the fiasco over the diminution of the powers of the Resource Planning and Development Commission (RPDC) in relation to the review of the proposed pulp mill in the Tamar valley in northern Tasmanian (see Flanagan 2007) for further details. The RPDC was the agreed umpire who's role was to review the proponents application and any other evidence. Two successive RPDC chairpersons resigned citing government interference and compromise of independence. This caused outrage and deep concern in the community. The developing crisis demonstrates the way in which due process and respect for community are disregarded by those in power here in Tasmania.

4. Citizens threatened or intimidated in order to coerce them into dropping their concerns;

5. Use of experts and advisory groups in order to convince citizens that their concerns were unfounded. Such approaches are an attempt to drown the citizen in facts and figures. This effectively leaves the citizen again isolated as they find themselves unable to connect with the language in order to mount a confident counter argument despite the feeling that their concerns have not been addressed. The air of authority that prevails during such encounters often leaves citizens with a feeling of diminished power;

6. Environmental NGO's (non-government organizations) in the State are able to lend moral support and perhaps support by writing letters of concern to industry and government, but are not able, in the majority of cases, to provide ongoing in-depth support. Usually such support is left up to those of us who provide *pro bono* support to community¹⁷.

The TCRA board agreed that while in some cases the concerns of citizens may be unfounded, there were many other cases where concerns appeared to be legitimate. Time and time again, our experiences showed that citizens with legitimate concerns would have to fight an uphill battle just to be heard, let alone listened to. The official response has been to simply ignore concerns especially where there is the potential for serious outcomes that may reflect badly on industry or the government. For their part, the various groups within the Tasmanian environment movement are so fixed on their main agenda of 'saving the environment' that they simply have little energy, time or resources to support the range and number of issues raised by community members.

On the basis of our experiences it was also clear that governments, industry, environmental NGOs and activists of all persuasions were either telling communities what was good for them or advocating on their behalf without actually ever undertaking regular dialogue as to their concerns and opinions. We found this left citizens confused and de-energized and likely to simply 'turn-off', such was their sense of frustration and feelings of

¹⁷ For example a case was referred to me by an NGO in 1984, which took 7 years to settle. I supported a farmer who's land was polluted by run-off from a nearby tip site. The case quickly became very high profile. The farmer sued the state government and the local shire council. The end result was an out of court settlement. I managed the residue sampling, media, and communications with government and had the job of compiling the proofs of evidence for the case to be heard in the Supreme Court. Such support come at a high personal cost, both in terms of time and money as well as reputation. There are many other examples of such support that myself and others have provided.

isolation. Little wonder we hear claims by government authorities, industry and sections of the environmental NGO's that communities are growing apathetic. Many issues over the past 25 years have shown how communities have risen in protest when their interests have been threatened, examples include the Franklin River, Lake Pedder and Wesley Vale. While citizens seem to be capable of shaping their destiny they appear to react late and only when the stakes seem very high¹⁸. This situation has been mirrored on a smaller scale where once citizens had their issues solved they simply moved on until the next *emergency* arose.

When TCRA board members reflected on these issues and possible ways forward, the question arose as to whether our efforts would simply be more of the same, namely supporting citizens on a cases-by-case basis, fighting each battle as advocates 'leading the charge'. On the other hand, we wondered whether our efforts would be better spent tackling the problems of citizen empowerment in a more systemic way. We posited that our task was actually about embarking on a process of social change, while at the same time provide technical support to concerned citizens. This was an important turning point for our group.

Having identified what we felt was the main problem we then attempted to put in place a strategy to assist citizens in need. At the same time, we reflected on ways to ensure that the process would be self-perpetuating as it spread through the community with citizens helping each other, either on a one-to-one basis or via support groups.

The initial stages of CBA were fraught with difficulties and problems as we wrestled with the emerging issues. Supporting citizens with a view to somehow liberating them, although laudable and gratefully received, still left us with the feeling that we were treating a symptom and not the cause.

¹⁸ The recent proposal to build a pulp mill in the Tamar valley in northern Tasmania has caused public outrage and as such seems to indicate the potential for the emergence of a critical community. After many months of community disquiet clear arguments and critical analyses are beginning to emerge from within the community. Indications are that citizens are beginning to not only react emotionally, but they also provide carefully reasoned arguments in support of their positions. There has been ongoing disquiet within the community over the way resources, and in particular forests continue to be "managed". The pulp mill proposal has also raised a conundrum of problems and dilemmas in relation to democratic and due processes, leading to further divisions and deep conflict within the Tasmanian community. Our fear is that once the urgency over the mill issues subsides communities will revert to "life as usual" until the next "crisis" occurs. Observations over the past 25 years tell us that our community only ever 'reacts' to situations on a case by case basis. In short, the opportunity for long term proactive change appears to be limited.

While there was evidence that CBA was beginning to take off, we still had to work on a case-by-case basis, slogging through the maze of issues and problems surrounding the core problem in each case. We were sure that the key 'problem' was a social one and that working with citizens in the context of their world was a viable way to progress meaningful and informed action that would lead to empowerment.

By 2003, a new concept of CBA began to take shape as ideas about context, methodology and methods emerged. An important finding occurred to do with the basis of the ongoing conflict over the way natural resources were being managed. It became clear on the basis of several interventions and subsequent reflection sessions, that the underlying problem was to do with certain expectations held by all of those affected by the conflicts over natural resource management. At issue were differing expectations over the concept of certainty. For their part, communities expect absolute guarantees that management proposals will not lead to negative impacts on community or the environment. Industry expects to see approval for projects once the necessary requirements of regulations have been met. The governments expect 'best practice' and that their codes and regulations will be met, so that environment and community will be protected from loss or damage. Each expectation is underpinned by an implicit belief in certainty.

Of course several CBA projects had shown quite clearly that the expectations and values of citizens could not be met and furthermore nor could those of industry and government. In short, it was clear that natural resource planning and management (as practiced in Tasmania) could not guarantee certainty.

In a search for deeper understanding, we undertook further reflection and analysis, which led us to conclude that natural resource managers were making decisions using an inappropriate scientific framework. The frame of 'applied science' is the cornerstone of the legal, planning and decision making processes that underpin natural resource management. An Achilles heel was soon evident. Applied science is not able to accommodate human values and perceptions. Nor can it easily deal with uncertainty. Therein was the root of the problem. The next stage in the evolution of CBA involved further exploration of these matters.

PART B: Development of Community Based Auditing 2003 to 2007

Introduction

2003 to 2004 saw the progressive development of a philosophy and methodology to guide not only our interventions in the field, but also the development of the TCRA group itself.

The philosophy of CBA

The present form of CBA emerged out of the critical inquiry paradigm. Inquiry strategies within this paradigm place a strong emphasis on legitimization of the knowledge and ideas of 'ordinary' citizens. The case is made for 'ordinary' people as experts, charting their own course and setting their own destiny. At its kernel, CBA is a learning process, where participants explore human nature and the nature of change based on *experience* within the contexts they are operating in. No extant theory is used in any prescriptive way, save the use of a broad process of iterative inquiry. At its basic level, CBA seeks to test any claims to certainty that a proponent may make. In short, CBA seeks to *discover uncertainty*. This is discussed further below.

CBA has two parts: the auditing process, or the 'hard science' part, where data is collected for measurement, comparison and analysis. The second part is the 'soft science' part, where views, perceptions and emotion enter the process. In this part there is provision to support the growth and development of participants, including the facilitators.

Experience has also shown that citizens are able to complete assessments of project proposals put forward by proponents in areas such as forestry, agriculture and water management.

The key objective of CBA

CBA is based upon a rigorous search for disconfirmation or mismatch¹⁹. This is the essential core driving any audit process and involves comparing *stated objectives* with *actual practice* and *best practice* at both the technical and scientific levels.

¹⁹ The term is used here to mean bringing opposites together in order to create 'controlled conflict'. That is to say, a way of generating issues and problems that lead to a sense of unease and discomfort and, in the end, call for solutions and resolution.

The ISO-14001 audit system was used in the early days of CBA to show how an audit process could work. The user-friendly nature of ISO-14001²⁰ was a great help in communicating the ideas about auditing. The auditing approach has progressively evolved toward a focus on the way project proponents manage uncertainty. Much of the time we find that areas of uncertainty remain 'submerged' and therefore unexamined by the proponents.

Over the past 3 years CBA has drawn on the ideas within Post Normal Science²¹ (Harding 1998). Although a complete discussion of Post Normal

²⁰ ISO 14001 is an internationally recognized environmental auditing system put in place by the International Standards Organization. It is used by industry and government to ensure best practice environmental outcomes. The system was used by TCRA back in 1999/2000 in its first published audit. The use of 14001 added an air of professionalism and credibility to the community audit, and at the same time took the industry, media and authorities by surprise. This was a very important aspect of the psychological strategy at the time. This innovation also gave citizens an entry point as it was seen as 'best practice' and as such an accepted standard. Our attempt was to create a space for citizen participation This is distinct from much of the rhetoric coming out of the environment movement that leave citizens with little to hold onto as they struggle to make connections with environmentalism and their daily lives.

²¹ The following quote best describes the origin and approach of Post Normal Science, "Post-Normal Science is a concept developed by Silvio Funtowicz and Jerome Ravets, attempting to characterize a methodology of inquiry that is appropriate to contemporary conditions. The typical case is when "facts are uncertain", values in dispute, stakes high and decisions urgent". In such circumstances, we have an inversion of the traditional distinction between hard, objective scientific facts, and soft subjective values. Now we have value-driven policy decision that are 'hard' in various ways, for which the scientific inputs are irremediably 'soft'.

We can understand 'Post-Normal Science' by means of a diagram, where the axes are 'systems uncertainties' and 'decision stakes'. When both are low, we have 'applied science', the routine puzzle-solving like the 'normal science' described by Kuhn (1970). When either is medium, we have 'professional consultancy' for which the examples are the surgeon or the senior engineer. Although their work is based on science, they must cope with uncertainties, and their mistakes can be costly or lethal. It has long been believed that environmental and general policy problems could be managed at this level, but the great issues of global warming and diverse forms of pollution show that framing and implementing policies must frequently be done before all the facts are in. Thus many problems occur in the high-stakes, high-uncertainty region of the diagram, a condition referred to as 'post-normal. This is why there must be an 'extended peer community' consisting of all affected by an issue who are prepared to enter into dialogue on it. They bring their 'extended facts', that will include local knowledge, and materials not originally intended for publication such as leaked official information. There is a political case for this extension of franchise of science; but Funtowicz and Ravets also argue that this extension is necessary for assuring the quality of the process and of the product. In recent years the principles and practices of Post-Normal Science have been widely adopted under the title of 'participation'.

Science (PNS) is beyond the scope of this paper, suffice it to say that it seeks to deal with *uncertainty* in science and technology.

As PNS is an inclusive process we argue that its adoption here in Tasmania would lead to a significant reduction in the conflict surrounding resource management now rife at all levels in our community. However, I suggest that any attempt to embrace participatory approaches (such as PNS) in the context of the present social/political reality in Tasmania would be futile. Having said that, it is my view that a shift toward more participatory forms of resource planning and management will be made possible by focusing debate on the way uncertainty is managed. CBA is therefore the herald of a new framework for environmental planning and management.

The process of disconfirmation, which sits at the centre of the CBA process, drives this subtle agenda for change toward a new science that explicitly requires citizen participation.

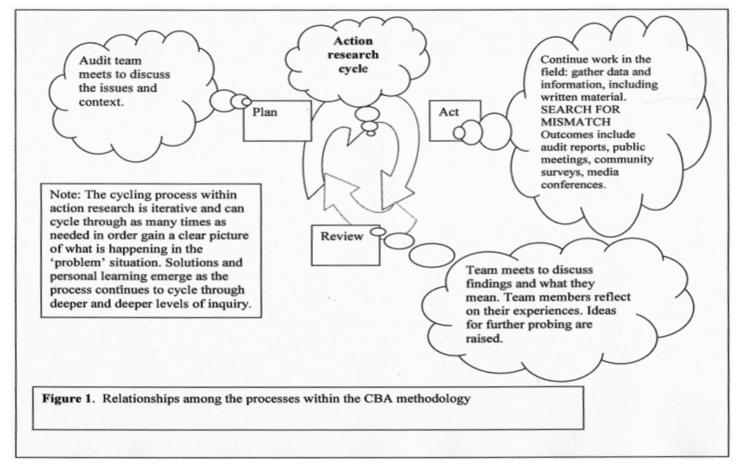
Methodological basis of CBA

The Community Based Audit process uses an action research approach to guide participants as they *plan-act-reflect* (Reason 1994). The action research²² process is a cyclic process that involves joint planning, action and reflection on outcomes and learning (including personal development), prior to subsequent cycles of inquiry. The action research process guides participants as they move from identifying the reasons for their concerns through to clarification of ideas about what is wrong and what should be done. The action research inquiry process invites reflection and discussion on the audit findings as well as reflection on outcomes from the intra- and interpersonal interactions. As well, matters relating to the social and political context and the personal growth experienced by each participant (including the facilitators) can be explored. The methodology can draw

²² Action research is a methodology within the critical inquiry paradigm. It takes many forms. The form we are using is known as participatory or PAR. In PAR learning takes place on many levels – from solving the problem that originally brought team members together, to embarking on journeys of self discovery and personal improvement. Over the past 7 years TCRA has seen several instances where participants have undergone what they feel is significant personal change leading to improvements in their personal competence as activists and change agents. Typically, an engagement with a community group can last 3 to 6 months during which time TCRA facilitators work with the team beginning with problem/issue definition through to investigation, reporting and publication. A series of workshops and reflection sessions are held during the course of the intervention. At all times the TCRA facilitators seek out opportunity for team members to experience personal growth as they move to become empowered and confident citizens. In the end though it is the individual's decision as to how in-depth they wish to go.

upon any number of methods and tools during the inquiry process. In the case of CBA we drew inspiration and ideas from Post Normal Science in order to set up the basic inquiry process. Likewise, community teams may wish to introduce their own ideas and methods, e.g. use of art or theatre to present findings. The methodology is open to all sorts of ideas and innovations. The only requirement the TCRA facilitators insist on is final publication in order to make findings and the inquiry process available to the public. This ensures ongoing debate and the creation of a citable public record.

Figure 1 shows the interrelationships among the components making up the methodology.



The disconfirmation process

CBA uses what is termed a dialectic process²³, whereby the inquiry team²⁴ seeks out discrepancy and mismatch. For example, if a proponent's onground actions are at odds with directions laid down in their management prescriptions²⁵ then a mismatch is said to exist. From that point, a process of deepening inquiry can begin.

CBA acknowledges that the science and technology used by the institutions (including governments) is based on the notion of certainty. Those using CBA are introduced to science in terms of a quest for knowledge. This distinction between knowledge and certainty is important as it brings to the fore the reality that much of science is based, ultimately on assumptions and probable outcomes: nothing is certain. This is of particular importance for those proponents who make assertions along the lines of, 'we are assured that there will be no adverse risks resulting from this project....' Those who beg to differ are expected to prove the proponents wrong. Experiences shows that in pursuing such challenges citizens often fall for what is in effect a trap and seek through protest²⁶ and use of experts to prove the proponents wrong. What ensues is a game of 'expert versus expert' that, if not carefully managed, leaves citizens 'rich with data but poor in useful information'. CBA takes a different path involving unpacking the proponents documented arguments in order to unearth the underpinning assumptions, thus opening up the possibility of counter claims as to the soundness of the proponent's science²⁷. Once the audit process begins to unearth weaknesses in the proponents science the potential for a *spiral of unravelling* is then possible as the proponents 'science' continually fails the test of *certainty*. This part of the process must be handled in a sensitive and ethical manner, as it is important that the audit team strives to pursue the facts and not the persons involved (the

²³ The term is used here to mean bringing opposites together in order to create 'controlled conflict'. That is to say a way of generating issues and problems that lead in turn to a sense of unease and discomfort and, in the end, call for solutions and resolution.

²⁴ Composed of citizens and TCRA facilitators, who act as co-learners and trainers.

²⁵ This document forms the basis of the audit process where the actual on the ground practices (actual or proposed) are compared with the requirements as set out in the proponent's plan.

²⁶ This is not to suggest that protest is a waste of time, clearly in some circumstances it is a valuable tool for public expression and its use has led to significant change. However, it alone can be of limited value.

²⁷ Of course any such claims are made in a political and social context that assumes *absolute* knowledge and that certainty²⁷ is possible (See Tattersall 2007 for further discussion). This condition simply enhances the opportunity to set up a dialectic process to drive the deepening inquiry.

proponents). Here the arguments must be carefully thought through, as it is not just a case of presenting counter facts²⁸.

To put it in terms of 'real world experiences', the community based audits conducted to date demonstrate that in many cases the management prescriptions developed by proponents have failed because they were developed within a 'hard science' framework that cannot deal adequately with uncertainty. The experiences from the field show that proponents go to great lengths to confirm that they are certain about the claims they make in their management prescriptions. For their part, those using CBA simply ask the proponents to produce evidence in support of their claims, which of course leads to another turn of the spiral of uncertainty.

These experiences told us that what were needed were planning and management frameworks capable of handling degrees of uncertainty, where professional judgment, local knowledge and 'soft' data are admissible. This was the main finding that the disconfirmation process had highlighted in successive audits.

Auditing methods used in CBA

The CBA audit process occurs on 3 levels:

1. Auditing the management prescriptions a proponent intends to use to guide management of a project. Here the auditors, in consultation with their experts seek to discover gaps, discrepancies or anomalies in the prescriptions and/or the science that underpins them. Auditors seek verification of any assertions or claims made in support of prescriptions. They also seek proof of risk assessments used in support of proposed practices that may have an impact on communities or the environment. This intense cyclic process continues as the audit team mounts an exhaustive search for failed logic and faulty reasoning. The aim is to show that either the basic planning assumptions were wrong in themselves or wrongly applied to the site in question (e.g. a forestry coupe). Even worse, should the team show that the actual knowledge about the site was incomplete or deficient in some way then this would constitute a major error. For example, a number of past audits have shown that the application of general theories to a specific site can be fraught with problems.

²⁸ It is one thing to meet a fact with another 'counter' fact, but quite another to show that ones facts are resting on faulty reasoning.

2. Auditing the site where the management prescriptions are to be applied. Walking the site is vital. Samples and photographic evidence may be sought during this phase of the inquiry. Experts are used to interpret the application of the prescriptions to the site. Again mismatches, anomalies and errors are exposed, tested and documented using a rigorous cyclic process of inquiry.

3. Community members then create a publicly available text of their inquiry. This is an important step in the process, both from the point of view of the participants and the wider community, who can then learn from documented experience, gleaning ideas and inspiration. Each audit represents a growing literature carrying common themes linking the need for participation in order to reduce risk and uncertainty.

In the following section the approach is explained using a recent community support project as an example.

An example of Community Based Auditing

A recent community audit (Nicklason et al 2004) looked at a proposal to clear fell a forested area in a catchment in the North East of Tasmania in an area known as The Blue Tier. A local community group was concerned that clear felling in the catchment would negatively impact on water quality and yield, flora and fauna, tourism amenity and cultural heritage values. The group initially surveyed their wider community and discovered significant community attachment to the proposed logging area. The group then proceeded to audit. The focus of the audit was to determine whether or not the proponents²⁹ of the logging operation had, in the first instance, identified the same environmental aspects as those already identified by the community group and whether or not a thorough risk assessment had been completed.

The group began by accessing information on the biophysical aspects of the area including the proponents Forest Practices Plan. The group then walked the site, taking photos and making observations. The group met and asked critical questions of the Forest Practices Plan and then met with the proponents to discuss their concerns and issues. Unresolved issues were then taken for expert review. Remaining mismatches and concerns were then taken back to the proponents for discussion prior to writing up

²⁹ The term "proponent" as used here means a company or government body who wishes to proceed with a project, e.g. logging of a forest coupe. Usually the proponent produces a plan or prescription detailing the operations they are to perform.

of the audit. The upshot of the inquiry was the discovery that the proponents had not adequately addressed significant environmental issues such as water quality and yield, cultural values and tourism amenity. Once again logging in fragile catchment areas could not be supported by the available science. The deeper the audit team probed the more tenuous the proponents case became. On-ground surveys by the audit team showed that the proponents had failed to correctly map streams and take into account a number of other significant matters. Similar finds were made in another audit that led the proponents to withdraw their management plan (Gschwendtner et al 2001).

The use of a well designed community survey by the community group was a very useful way to test community feeling and at the same time gather something in the way of an 'authority to act'. Having community backing is vitally important and also ensures the audit group has to 'report back' to its community, thus bringing more citizens into the peer review process.

The group was also able to put forward logical and convincing arguments relating to inadequacies of the proponents Forest Practices Plan and the *State Forest Practices Act*. Finally, the group put forward alternative plans for the area, which included the development of a nature recreation area (Nicklason et al 2004, p.9). The final report was then distributed to the Local Council, the proponent, media, government, libraries and general community through a series of community forums. This process, given only in summary here, is very powerful in that not only were the community members involved in action and *learning* (Dakin 2003), but they were also creating a clear record of *their work – their science*.

Once produced the Community Audit report, replete with its expert evidence, graphic evidence (including transcripts of interviews) and journal format, stands as a credible, well argued and logical case study in an 'easy read' style. Each edition has an ISSN, which means it is sent to State and National libraries and is in demand in other government and NGO libraries as well. The audit report is a vitally important outcome as it is a building block of an emerging literature that when viewed in total integrates a coherent and citable argument for change.

Conclusions

CBA is an innovation that seeks to come to grips with two key and interrelated problems. The first is about improving the depth and quality of

citizen involvement in natural resource planning and management. CBA seeks to answer a call from increasing numbers of citizens for greater accountability on the part of industry, governments and the environment movement. At the same time citizens want a greater say over the decisions relating to natural resource management and planning. How to make this happen is of itself a major undertaking. Although this was the original reason for CBA, it is not the *main* or key problem CBA seeks to address. Indeed there is something even more fundamentally wrong, that once addressed will lead, in all probability, to reduced conflict. The second or main problem relates to the uncertainty inherent in many of the management prescriptions developed by the proponents managing the natural resources in Tasmania. This has been evident in a series of incidents, viewed by many as instances of wrong decisions on the part of the proponents. The legislative frameworks supposedly followed by the proponents are consequently seen as inadequate as they are unable to adequately protect the community and its resources from environmental damage and unfettered exploitation. This is leading to escalating discontent and conflict within the Tasmanian community. Sections of the community are claiming that industry, with the willing support of governments, is seeking to take control of the State's resources.

Decisions affecting natural resources involve risk and uncertainty. History has shown that many of the prescriptions put in place to manage natural resource projects do not survive rigorous independent scrutiny (Bleaney 2004; Dockray 2001; Dockray et al 2001; Eastaman and Walsh 2006; Gschwendtner et al 2001; Nicklason 2004; Tattersall 2003). The prescriptions fail because they are developed within a 'hard science' framework that cannot deal adequately with uncertainty. This suggests that planning and management frameworks are needed capable of handling degrees of uncertainty, where professional judgment, local knowledge and 'soft' data are admissible. I propose a process of 'extended peer review' along the lines of that discussed by Gallopin, Funtowicz, O'Connor and Ravetz (2001).

Over the past 3 to 4 years CBA has partly addressed these two complex problems, but much more remains to be done. In any case, it is clear that the growing chorus of voices calling for greater citizen involvement represents an ideal opportunity to move forward via innovative approaches to participative decision-making such as PNS. In short, part of the answer is in the problem. Setting aside conspiracies³⁰, the main obstacle preventing a move forward appears to be the rigid legal systems that require the operationalizing of the notion of certainty. For its part CBA seeks to use a reasoned process to challenge and ultimately overthrow that norm.

References

Bleaney, A 2004, 'Community based audit of chemical incident preparedness and response in catchments above St. Helens in North Eastern Tasmania', *Upper Catchment Issues Tasmania*, vol. 2, no. 3, Journal of Tasmanian Community Resource Auditors Inc., Tasmania, Australia, ISSN 1444-9560.

Dakin, S. 2003, 'Challenging old models of knowledge and learning: new perspectives for participation in environmental management and planning', *Environments*, vol.31, no.1, pp.93-10.

Dockray, M., Wearne, S. & Strie, F. 2001 'A community based audit of forestry operations in the Mt Arthur Upper Catchment', *Upper Catchment Issues Tasmania*, vol. 1 no. 2, ISSN 1444-9560, Tasmanian Community Resource Auditors Inc.

Dockray, M. 2001, 'Community based audit of forestry operations at Lebrina coupe RT241F and adjacent Bare Point area', *Upper Catchment Issues Tasmania*, vol. 1 no. 3, ISSN 1444-9560, Tasmanian Community Resource Auditors Inc.

³⁰ There is supposedly a growing body of evidence that suggests conspiracy by industry and government is alive and well. The supposed aim of the conspiracy is to take control of Tasmania's natural resources (in particular public forests, land and water) with the approval of a community fearful of economic hardship as a result of a lack of investment and attendant unemployment. For their part, governments are busy keeping the conflict running along the lines of anti-Green in order to ensure they have the mandate to continue with business as usual. On the surface, it appears that industry holds sway over the government and people with threats of leaving the state if they can't get their own way. Authors such as Flanagan (2007) have suggested elements of this deeper conspiracy.

Eastman, K. and Walsh, T. 2006, Protecting the Tasmanian Giant Freshwater Lobster –saving the *Astacopsis goudi* from the Recovery Plan Process', *Upper Catchment Issues Tasmania*, voll.3, no. 2, ISSN 1444-9560, Tasmanian Community Resource Auditors Inc.

Flanagan, R. 2007, 'Out of Control – the tragedy of Tasmania's forestry', *The Monthly*, May 2007.

Gallopin, G., Funtowicz, S., O'Connor, M., and Ravetz, J. 2001, 'Science for the twenty-first century: from social contract to the scientific core', *International Journal Social Science*, 168:219-229, pp.1-16.

Gschwendtner, A., Eastman, K., Mills, D. & Tattersall, P.J. 2001, 'Catchment issues in the North Eastern Highlands of Tasmanian – A community based case study', *Journal of The Community Based Risk Assessment Group of Tasmania*, Vol. 1, No. 1, ISSN 1444-9560.

Harding, R. (ed) 1998, 'Gathering and using data-beyond the scientific paradigm', in *Environmental Decision making: the Roles of Scientists, Engineers and the Public*, The Federation Press, pp.82-107.

Kuhn, T.S. 1970, *The Structure of Scientific Revolutions*, 2nd edition, Chicago, University of Chicago Press.

Nicklason, L., Hansberry, B., and Coghlan, F. 2004, 'Community Based Audit of The Blue Tier proposed forestry operations – North East Tasmania, *Upper Catchment Issues Tasmania*, vol. 2 nos.1a &1b, ISSN 1444-9560, Tasmanian Community Resource Auditors Inc.

Reason, P. 1994, 'Three Approaches to Participative Inquiry', in *Handbook of Qualitative Research*, eds. Denzin and Lincoln, Sage Publications, pp.324-329.

Tattersall, P.J. 2003, 'Community based auditing: empowering the community to take charge – pathways to a just and sustainable society', in *Proceedings of the Community Research Network, 6th Annual Conference,* "powerful Collaborations: Building a Movement for Social Change, October 16-19, 2003, ed. Rick Worthington, Sandstone Minnesota, USA (www.loka.org/conf2003/2003_conference.htm).

Tattersall, P.J. 2007, 'The case for a new form of community involvement in resource planning and management in Tasmania', In Press, *Upper Catchment Issues Tasmania*.

About the author

Phil Tattersall is well known for his community support work in Tasmania over the past 25 years. He was a key figure in resolving the Exeter tip issue as well as a number of other environmental test cases in which he advocated for citizens on a range of issues, including industrial pollution, aerial overspray, worker health and food contamination.

In 1991 he pioneered Community Based Sampling, the forerunner of CBA.

He is now researching new approaches to community advocacy through his Ph.D studies.