

MAY 2008

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# Upper Catchment Issues

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TASMANIA

## Part 1

### **The Case for a New Form of Community Involvement in Resource Planning and Management in Tasmania**

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## Part 2

### **Community Intervention Case Study**



Community based activism

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## *Upper Catchment Issues - Tasmania*

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**Editorial:**

This edition explores an idea for a new direction for activism here in Tasmania. In making their case the authors argue that the tools and methods traditionally used by activists and the environment movement will become less and less effective in bringing about change. As issues become more complex and integrated new and innovative methodologies will be required to meet the ongoing challenges facing natural resource management.

The authors posit that activists and the movement will need to rethink their 'worldview' as to how things 'should be', and how best to represent and advocate for communities that more and more call for our support and intervention. The first author senses crisis in the way we activists are currently 'doing business'. The second author's case study reveals some of this crisis.

The authors believe that personal transformation will be a cornerstone of the new activism as citizens themselves move to new levels of engagement supported by activists who will act as facilitators and change agents. Without the direct involvement of empowered citizens-as-activists, the authors remain pessimistic about the future of our democracy.

Please read and enjoy.

The UCIT Team



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## **The Case for a New Form of Community Involvement in Resource Planning and Management in Tasmania<sup>1</sup>**

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### **Introduction**

This paper discusses some of the challenges facing the Tasmanian community and those advocating on its behalf for improvements in the quality of decisions about the long-term health of our resources and in particular our natural resources. My prime concern is the way in which institutions and organizations<sup>3</sup> tend to undervalue and manipulate the concerns of community members, seeing them simply as receivers of information and services, rather than as the ultimately responsible persons who foot the bill for and live with the consequences of faulty decisions. It is clear that those acting on behalf and in the interests of the community and the environment will need to find new ways to bring the community to the locus of control and ongoing engagement. In short, the relationship between activists<sup>4</sup> and the communities they represent is in need of urgent change. It is clear that leaving the power in the hands of a few has led to a number of serious problems, not least of which is the disconnection of community from an active control over its future.

To that end, environmental activists and community activists in general, also need to undergo much needed change and perhaps reinvention in order to meet the emerging challenges of an uncertain future. This is especially relevant where their role relates to supporting the community

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<sup>1</sup> This is a modified version of earlier papers by Tattersall 2003 (a&b).

<sup>2</sup> Philip is researching environmental activism in Tasmania.

<sup>3</sup> Governments, Departments, local authorities and the environment movement.

<sup>4</sup> In this paper, the term “activist” refers to a spectrum of approaches used by community members in bringing about social change.

and facilitating meaningful change on all levels. My submission is therefore an attempt to move beyond “No!”.

It is also clear to me that science and the law, in their present forms, are unable to meet the emerging expectations of society, particularly in relation to the application of the *Precautionary Principle* within sustainable development<sup>5</sup>. The key issue relates to the concept of uncertainty, particularly where actions are urgently required. As it now stands, all legislation requires a degree of certainty in the science that underpins it, particularly where public funds and assets are at stake.

The reality of course, is that matters are seldom clear and there is always a degree of uncertainty. In such cases, we are required to exercise our judgment. This judgment may be well informed or simply a “best estimate”. Either way, things can still go wrong. Even when we “get it right” through the use of “good science” - high quality research and field trials - things can go wrong. Then there is the point where science and business interests meet – that complex domain of money, power, values and community concern. I will argue that science, in its present form, has some limitations that have led us into problems and to some extent, away from achieving a sustainable future. This leads to a critique of science, including its use within the framework of law. I identify a number of ‘Achilles Heels’ or weaknesses that have led us into a conundrum of problems. I then go on to discuss the necessary moves toward a new science, capable of responding to the challenges of complexity and uncertainty, while at the same time offering greater inclusiveness. For this to happen I suggest current forms of activism must undergo a period of reinvention (with a focus on environmental activism) in order to fully support and engage community in its ‘new role’ as a primary leader in resource management decision-making. I then briefly explore some of my ideas about Tasmanian culture and the role of activism. I will then propose

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<sup>5</sup> The Principle states, “...where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the Precautionary Principle, public and private decisions should be guided by careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and by an assessment of the risk weighted consequences of various options” (Draft National Strategy for The Ecologically Sustainable Development, Canberra, June 1992). The process was exhaustive, involving all sectors of Australian community, government and industry. Among the guiding principles was the “Precautionary Principle”. Some argue that this principle enshrines the very basis of careful and responsible development.

a form of applied Post Normal Science (Gallopini et al 2001) that I believe is a useful starting point for further discussion and perhaps development.

In part 2 of this paper Kim Eastman presents a case study that describes in some detail an example of a number of community support projects, each of which led to unique learning opportunities.

## **Motivations for My Work and Interest in Community Participation**

It is my belief that if we are to have any real hope of creating a more just and sustainable society we must involve as many citizens as possible in decisions relating to resource<sup>6</sup> management. This is the key belief that motivates me in all of my work ‘out there’ among and within communities here in Tasmania. A large body of experience and applied research attests to the power of participatory and inclusive decision-making (Fung & Wright 2003). Often though, stakeholders are either left out or given token access to the decision-making process. The consequences of this are, I argue, quite serious.

In my nearly 30 years of community activism here in Tasmania I have seen many times the way in which community<sup>7</sup> seems to have been cut-off from meaningful participation<sup>8</sup> in resource planning and management. The basis of my assertion lies in direct experience with many groups and individuals across the State. Issues of concern have included aerial over-spray issues, industrial pollution, negative impacts from forestry operations, and impacts from waste management operations. During the course of my work, I have always had concerns about the matter of representation. That is, on what authority or under what warrant does one represent community? Whose interests are we serving and with what

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<sup>6</sup> Here I use the term resource in a broad sense to include natural and man made resources.

<sup>7</sup> Throughout I use the term “community” with special meaning based on community development research. This usage is consistent with the notion of “community of attachment”, (Wilmott 1989) talks of community attachment in these terms, “*It is not easy to select an appropriate label for it... I call it the ‘community of attachment’ or ‘attachment community’.* A particular advantage of the term ‘attachment’ as a term is that it brings together the two key elements contained in this concept. One has to do with the extent to which people feel a sense of identity with a place or a group and of solidarity with their fellows living in it or sharing its interests or characteristics” (Orange Agricultural College, The University of Sydney nd).

<sup>8</sup> That is, involvement at the very start of a project proposal where public assets are to be exploited (examples include public water, public land and public forests). Or anywhere where decisions are to be made on behalf of the public.

consequences? To that extent, there is a debate in my mind as to the effectiveness of the environment movement in engaging community more fully in matters of resource management. I maintain that the environment movement must become more efficient in such a role as there are few other groups within our society who can meet such a challenge. My experience shows that many community members and indeed whole communities continue to require support on a range of environmental issues. I assert the need is great and community has nowhere else to turn.

In the following section, I briefly introduce the broader (local and national) economic and political forces that continue to influence the nature of the relationship between community and the environment movement. I will then move on to develop the discussion along the lines of opportunities and impediments for enhancing community involvement in resource management here in Tasmania.

## **The Tasmanian Context**

Tasmania's isolation, relatively low population (less than 500,000) and rich resources have meant that it has been a target for resource exploitation for some time. Since colonial times Tasmania has been 'easy pickings', initially by the British colonialists, followed by mining, those seeking cheap hydroelectricity and now cheap timber. The publicly subsidised hydroelectric schemes saw governments of the day inviting energy hungry companies to our shores with the assurance of cheap power. Progressively the community became dependent on such industry. Likewise with forestry - a cheap resource subsidized by the Tasmanian community. While employment was good, the environment suffered under what was yet another form of imperialist domination.

The 'normal' process of resource acquisition involves a kind of game whereby industry, with the covert support of governments, seeks to devise ways of controlling public resources without the public becoming aware of what is happening until it is too late. The woodchipping industry in Tasmania is one example where, back in the early 1970's, the industry and government promised to use only the leftover material from the then vibrant timber industry. A further aim was to clear timbered land considered worthless<sup>9</sup> (Meredith, ed. 1996). An unsuspecting public went

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<sup>9</sup> Bob Bensemann relates a story from that time: "I helped Northern Woodchips get off the ground along with entrepreneur John Hall. Tied up land to get enough supply in Tasmania to work for

along with the idea and within a decade the industry had permission to chip large tracts of public forest. Since the 1980's there continues to be growing public disquiet over the spread of clear fell logging in the state. Moves were made by The Greens<sup>10</sup> to limit the power of the forestry industry, which led to the major political parties banding together to create Resource Security Legislation in order to give the industry much needed guarantee of resource supply. This, along with the outcomes of the Regional Forest Agreement, has led to growing community concern about the health of forests, rivers (Dockray et al nd; Dockray 2003), and the standard of infrastructure (in particular roads, which suffer huge damage from log trucks). The nature of log transport changed once large tonnages began to be harvested. There was a progressive move to road transport and the extensive government owned rail system was all but disbanded. In my view, the community lost control of yet another resource as government and industry effectively used public assets to pay for log trucks, log truck maintenance and road repair, thus once again meeting the interests of a select few businesses in the state.

All of this resulting from an industry that had claimed it was only intending to have limited intervention, and to clean up the rubbish from a saw log driven industry. This, I believe, has had a profound effect on the Tasmanian Community, which has resulted in a growing loss of faith and cynicism on the part of the Tasmanian public toward industry and governments. This was capped off by a serious political bribery scandal following the election of 1989 (Flanagan 2007), which left the great majority of Tasmanian's stunned and ashamed. The necessary upshot of all of this is that we are seeing the Tasmanian community move to a new position, evidenced by a growing confidence to speak out on a range of issues of concern. The curtailing of excessive hydroelectric schemes during the 1990's, the moratorium on Genetically Engineered crops and the recent rejection of a pulp mill proposal for the Tamar Valley were the result of intense debate within the community, leading to what some saw as a backlash. One can sense a revolution of ideas in the making.

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Japanese....APPM had a complete monopoly, and was paying 20 cents a ton in 1970. Northern woodchips offered 50 cents a ton. Before woodchipping, bushland was often considered to have a negative value, i.e. that it would be more expensive to clear it than it was worth. At about this time, some bushland runs at Bridport sold for \$3 per acre and at Bridgenorth for \$17...because it would cost much more that that to clear the land, plus it had virtually no sawlogs... ”

<sup>10</sup> The Greens are the Tasmanian political party known as The Tasmanian Greens.

The ongoing debate over Tasmania's direction has led to the *Tasmania Together*<sup>11</sup> process, which has been active for several years. Forestry management and resource based issues generally loomed large as issues of concern. Slowly the community is seeing the need to take some leadership. There are concerns regarding the effectiveness of the *Tasmania Together* process, and whether it can in fact deliver on its promises. It may be yet another ploy by government-industry to "occupy the community while they work on business as usual". After all, it would not be the first time Tasmania has experienced this in its short and often violent history. I argue that Tasmania remains in the grip of a pioneering colonialism that still controls much of the "business as usual". I will discuss the basis of this later on. In any case, it is without doubt that political decisions at the National level also influence outcomes and have serious ramifications at State level.

### ***Influencing factors from beyond state borders***

The National context continues to play a significant role in shaping the way in which environmental issues are handled here in Tasmania and consequently they should not be left out of a discussion such as this.

Wherever one cares to look we see evidence of communities, industries and governments at loggerheads over resource-use proposals and decisions. Whether it is uranium mines in Northern Territory, whale hunting in the Southern Oceans, hydroelectric development in Tasmania, or clear fell logging across the Nation, one can see the all too familiar pattern of proponents supposedly following codes and legislation only to enter into community and political "fire storms". These "fire storms" are usually led by institutions from within the environment movement (e.g. Greenpeace in the fight to stop whaling and The Wilderness Society in saving the Franklin River in Tasmania). We see the Australian Conservation Foundation highlighting many of the national issues of concern such as land degradation, water pollution, biodiversity loss and climate change.

Increasingly though we are seeing environmental issues taking on a global perspective as seen with the debates over climate change, scarcity of resources, genetic engineering and nuclear energy. As never before, issues are being felt across international borders. Climate change for instance is

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<sup>11</sup> A Government-community effort to explore visions for Tasmania into the future.

having huge economic impact on many nations. These impacts are already leading to conflict and a reshaping of global economics. In their move toward a global economy the major nations appear to be positioning themselves for a new form of imperialism. The recent conflicts over gulf oil reserves are one example.

This new global economic order brings with it new challenges for the environment movement, the most significant of which are the shifting political ideologies of many nations. In Australia, this one factor may be having a negative impact on the effectiveness of the environment movement (Christoff 2005). Christoff (2005) raises a number of interesting questions in relation to the reshaping of Australian values towards a more atomistic, selfish, apolitical, anti-intellectual, acquisitive and defensively nationalistic stance. He asks, “*Has the Howard Government reshaped the political terrain and ‘won the heart of Australia’ by refashioning public discourse to reflect these values?*”. In my view, the answer to this question is a definite ‘yes’. I believe that this ‘values shift’ continues to have a major impact on the effectiveness of the movement, not so much as a direct result of any plan to ‘turn the public against environmentalists’<sup>12</sup>, but more to do with a number of other factors. I discuss some of these below and expand upon them later in the paper.

Surveys here in Australia indicate that public concern over environmental issues has dropped significantly over the past 12 or so years (Christoff 2005). There may be several reasons for this. It is possible that the public believes that real action is underway and that environmental issues are being addressed, e.g. The Decade of Landcare initiative. On the other hand the public may be ‘overloaded’ and/or fatigued by the complexity of the current issues, particularly the way in which a number of significant issues have ‘run together’ (e.g. climate change and the consequential impacts on food and water availability). No longer are the issues ‘clear and simple’ involving specific iconic species or place. Genetic engineering, for instance, is as much about opportunities to heal the sick and dying and halting the spread of pests and disease as it is about profits and the spread of the ‘*new green revolution*’. Add to this the speed with which change is now occurring, with announcements on almost a daily basis, of another crisis or, on the positive, yet another breakthrough to save the environment.

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<sup>12</sup> This should not be discounted as I believe there is some evidence that this is the case as well. This point is touched on later in this paper.

The public is understandably overloaded, perhaps bewildered and wanting to turn-off. Where does this leave the *environment movement*? Does it understand what is happening and moreover how it should respond? Is the environment movement<sup>13</sup> in Australia losing touch, losing its effectiveness? Has it failed to maintain connection with communities? The evidence suggests that this is in fact the case (Christoff 2005). How then do we address this? What strategies and methods could we use to re-establish connection with the community? How can we get the community ‘out of the back seat’ and into control? Is that what is needed at all? I believe it is. I argue that the community has taken a ‘back seat’ and much of the time, is unable to be heard as the institutions, including the environment movement, do the talking, telling the community what is and is not good for it. This, in my view, has contributed to the present crisis of disconnection.

I argue that the community must have more ownership and a greater role in dealing with the crises facing Australia (and the world) as the current approach of ‘experts in control’ is not working. I maintain that activists will have a role to play as facilitators.

It is without doubt that environmental advocacy, expressed through forms of activism, will still be needed well into the future and that community should be driving the process of change through democratic means. The challenge then, is to find innovative ways to reinvigorate the movement. To that end, I intend to take a fairly pragmatic stance on the matter of change, and while recognizing the ‘global nature’ of the issues, I see opportunity in engaging local communities directly in the change process.

### **Is the Tasmanian Community Disconnected from ‘Real’ Decision-Making’?**

We continue to see the community spoken for and on behalf of by a range of interest groups including governments, industry and the environment movement. While it is not necessarily undesirable to have individuals and groups supposedly acting in the interest of community, it is not always clear whose interests are being served. This in my view is a troublesome situation that I will attempt to resolve throughout this paper.

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<sup>13</sup> I use the term environment movement to include ENGO’s, activists, E-advocates and lone crusaders.

As mentioned earlier, my experiences have shown me that community is seemingly cut-off from meaningful engagement and participation in the resource planning and management process. Throughout my 30 years of experience, I can cite many examples where community has been effectively left out of the process and allowed to put forward their views only after key strategic decisions have been made. Having public involvement in the very first stages of project proposals is a very rare event. For example, the public is never asked to propose forestry coupes for clear-fell logging, but they may (with enough pushing on their part) be allowed to see a plan for logging of a coupe. At best, the community is asked to provide “input” or “feedback” (Dakin 2003) after it has been *told* what is going to happen to *its* resource or in some cases, heritage. Why is this so? Is it a conspiracy by vested interests to seize publicly owned resources? Could it be a belief that community is incapable of direct involvement in matters relating to the management of its resources and its future? Or on the other hand is community simply apathetic or too busy with day-to-day life to have time for direct involvement? My experiences indicate it is a combination of all three. The task then, is about motivating community and at the same time examining innovative ways to engage community at the strategic level. To that end, I see a new role for the environment movement. I feel that community-based knowledge and know-how have been undervalued (for a number of reasons) for too long.

### ***Opportunities for the Environment Movement as it Repositions Itself to Engage Community***

I argue that community based knowledge, especially where it relates to strategic decisions affecting resource planning and management, is usually seen by the institutions<sup>14</sup> as a poor substitute for “real” knowledge. In fact, it may well be that institutions perceive ordinary citizens as incapable of generating “real” knowledge (Dakin 2003). This perception may be at the root of many of the problems we see with the acceptance of alternative ideas and arguments coming out of community.

My aim in this paper is to put forward an idea that I feel will partly address the problem of *community disconnection* here in Tasmania. In attempting this I will focus on one of the key tools used by activists to legitimize their

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<sup>14</sup> I include government, industry and the environment movement (including ENGO’s) as institutions.

arguments, namely *science*. I will argue for a new science that seeks the direct involvement of the community<sup>15</sup>. I argue that community involvement in the process of information generation and validation is essential. There is a twist to this. By bringing community into the locus of control, we introduce the potent ingredient of community ownership, whereby the relationship between activist – as advocate - and community members, is one of partnership. This, as it turns out, may have important consequences for the prevailing cultural, economic and political realities that are shaping the cultural discourse at the State and National levels.

I argue that to some extent the environment movement has become captive to the very thing it employs to bring about change, namely science. It tends to use counter arguments<sup>16</sup> based on “good science”, rather than critically examining the quality<sup>17</sup> of the science itself, including the way in which it is *done*. A recent case illustrates the usefulness of an expanded examination of the process of science. In the case of the proposed pulp mill for the Tamar Valley in northern Tasmania, environmentalists asked significant questions as to the legitimacy of the Pulp Mill Review Panel<sup>18</sup>. Issues relating to the independence of certain panel members came to light, which led in turn to resignations and ongoing questions about the integrity of the process (Stedman 2006). It would seem that while there may be ‘good science’ it is not always independent and untouched by values and perceptions. For those of us familiar with such situations this is hardly news, but may come as a shock to community members who see experts as authoritative and independent, particularly those in the public service. For its part, industry often claims it is in the middle, simply wanting to be told the ‘rules’ and given some assurances that once production is started there will be no ongoing conflict or interference from either community or governments. In following the rules, usually put together by industry and government with some ‘input from community’, industry uses ‘good science’ and seeks ‘best practice’ outcomes, win-win perceptions and reduced footprint, while maintaining high efficiencies and profits. Of

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<sup>15</sup> Such proposals have been put forward elsewhere (Wilsdon and Willis 2004).

<sup>16</sup> That phenomenon, known to many of us as, “you have an expert-I have an expert-you have an...” cycle.

<sup>17</sup> Here I am suggesting a broader definition of ‘quality’ to include the assumptions and assertions underpinning a given piece of work. By the same token the traditional quality criteria should also be tested.

<sup>18</sup> A panel set up by the RPDC (State Resource Planning and Development Commission) to review Gunns Ltd. pulp mill proposal.

course, the hook for community is increased employment and the potential for increase in community wealth.

If only the world could be so straight forward, and utopia so easy to attain. But alas we know from bitter experience that in many cases it is not so. ‘Good science’ is only as *good* as those who use it. I argue not so much for a *good science*, but for a better one –where the risks of *getting it wrong* are clearer and, above all, reviewed and understood by all stakeholders. It turns out the environment movement may have an important role to play. I shall explore these issues further on.

## **Part 1: A New Science Is Needed**

### **Normal Science<sup>19</sup> – Only One Way To Inform Decisions**

#### **Limitations of science**

Science tends to apply general theory to specific situations and in so doing develops predictions and prescriptions for action in those contexts. This, as I will show, can be an ‘Achilles Heel’. During my nearly 30 years experience helping community groups and individuals I have seen many times how ignorance or dismissal of local variation, circumstance and concern has led to problems. Many times, there is simply no substitute for local knowledge and custom. Thus appears an ‘Achilles Heel’, namely general theories can and do have their limitations.

The importance of embracing locally relevant information at all stages of an inquiry is brought into focus with the following example from Harding, 1998:

*“Since the nuclear accident at Chernobyl in 1986, scientists have been monitoring and attempting to manage the radioactive fallout which had drifted across Europe at the time of the accident. In the sheep farming community of Cumbria (England) scientists were brought in by the government to examine the future implications of the radioactive fallout on the local sheep farming industry and to review the restrictions which were imposed on the industry (Wynne, 1989). Scientists and officials based their management of the problem on the belief that radioactive cesium would be*

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<sup>19</sup> The current form of reductionist experimental science (see White 1993).

*immobilized in the soil and that it would be only a matter of weeks before the farmers would have restrictions on the sale of their sheep lifted. As it turned out, the radioactive cesium remained active much longer than expected and the restrictions ended up lasting years. The scientific assumptions were based on research conducted on lowland, clay mineral soils. The upland soils of Cumbria were much more acidic however, and reacted differently resulting in the cesium becoming chemically mobile in the soil and taken up by the vegetation. The scientists ignored local variations in geological and vegetation conditions. The inaccuracy of these scientific predictions and findings severely reduced the community's confidence in "expert" knowledge..."*

The key problem here is to do with the way in which assumptions are used. The basis of the assumption is a theory or general rule - what holds for one context should hold for another similar situation. Many times we find that this is not so.

A case involving potential impacts on certified<sup>20</sup> organic farming enterprises arising from forestry operations and conventional agriculture helps to further demonstrate the above point. In this case, (Gschwendtner et al 2001) proposed forestry operations were perceived by a neighbouring organic farmer to be an unacceptable risk. The proponents claimed that adherence to their approved Forest Practices Plan<sup>21</sup> (based on sound science) would guarantee no negative impacts. Despite this, the proponents of the forestry operations were not able to clearly demonstrate that their operations would not compromise organic certification or that water supplies would not be adversely affected. Their key assumptions, as detailed in their Forest Practices Plan, could not withstand critical scrutiny.

Problems are not limited to forestry activities. In the past, there have been cases where crop production operations taking place near rural towns caused concerns regarding drift from aerial spraying<sup>22</sup>. Townsfolk and local activists raised the alarm about possible drift onto a local school. In both cases, local knowledge and concerns were initially dismissed as either

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<sup>20</sup> Farms certified to the National Standard for Organic and Biodynamic Produce (and Australian Quarantine Inspection Service, managed certification system).

<sup>21</sup> A plan approved under the Tasmanian Forest Practices Code administered by the State Forest Practices Authority.

<sup>22</sup> Over spray of the Forest School in North West Tasmania, Senate Select Committee on Agricultural and Veterinary Chemicals, a hearing held Launceston Tasmania Nov. 9, 1989, pp. 4163-67.

not relevant or based upon emotion and therefore unfounded. As it turned out the reality of the situations was something quite different. After a long and bitter conflict, the assumptions of the proponents did not withstand critical scrutiny. Needless to say the image of “expert knowledge” was damaged.

In these cases, as with the case detailed by Harding above, we get a glimpse of the way in which science interacts with legislation. As with much of the law, resource legislation relies upon science to provide it with an objective basis consisting of scientific laws to guarantee predictability and certainty. It is this preoccupation with the notion of certainty<sup>23</sup> that has landed us in hot water, as I will show!

### ***Science and the law***

We accept that legislation should offer the necessary protection for our natural and human systems. It is also accepted that the planning protocols embedded in the legislation and industry codes should lead to decisions that are in the best interests of the community. Legislation or law is the formal articulation of the will of the people. In a democracy, the elected government is given a warrant to carry out its mandates, the result is legislation. I argue that this is where some of our problems actually begin.

The legal framework effectively removes the flexibility of any science it covers. This is the point at which “good science” could very quickly become “bad science”. The difficulty with the current legal framework is that the emergent “legal science” is only capable of reacting to situations as opposed to responding in a proactive way to “what could be”, namely, complex and unpredictable outcomes. In short, legal science can never hope to act in a truly precautionary way.

In practice if all the legislative requirements have been met for a proposed project it is highly probable that it will proceed despite, in some cases, an overwhelming mountain of “other” evidence (e.g. lay opinions, observations, calls for caution and other concerns regarding possible hazards and dangers). Then, when things go wrong we hear “we could have done it better...” and the public picks up the cost. Examples include: decisions to place housing estates on old waste disposal sites, the BSE

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<sup>23</sup> Science is of course about knowledge, not certainty. This was eloquently argued and explained by Bronowski, J. 1976, (*The Ascent of Man*, Published BBC, Printed by Caston and Sons Ltd, London ISBN 0563170646).

issue, breast implants, and salinity and flooding resulting from wholesale land clearing. Legal science cannot deal with uncertainty. When the concerns of community cannot be objectified in the context of a code or legislation then those concerns are seen as merely anecdotal and without a scientific basis. Yet repeatedly community concerns have been justified after the fact. On the one hand, legislators and regulators will claim that they must be able to apply the law in a fair and unambiguous way, while on the other community finds itself dealing with adverse consequences of "development". In the middle is "industry" who simply wants to know, what the rules are. Clearly, this is a conundrum of uncertainty.

I argue that the quest for certainty in a sea of complexity has got us into trouble!

Harding (1998) explores the question of science's search for certainty:

*"Underlying much scientific analysis is a tendency to minimise uncertainty. In some cases, short decision-making time frames or unknown parameters can make reducing uncertainty very difficult, if not impossible. The absence of reliable facts in these cases will mean the reliance by researchers on personal judgment. Since science aims to reduce subjective inputs, values inputs and uncertainty are often not acknowledged and thus inappropriately managed in this traditional framework. There are two important issues arising from the failure of science to deal with high levels of uncertainty:*

- 1. Valuable information may be underutilised or disregarded if scientists and engineers are reluctant to use or disseminate information which may be of high quality but is part of as-yet inconclusive study. Latin (1992,p.6) states that 'they [scientists] may withhold the best available, albeit imperfect, information from political and legal decision makers who are ultimately responsible for imposing protective or exploitative policies'. Scientists and engineers are often in the dilemma of deciding whether such uncertain information should be distributed amongst colleagues and how they can participate in establishing collective databases without risking their professional credibility.*
- 2. Failure to adequately acknowledge and manage uncertainty and value differences is an important contributor to conflict over environmental and resource management (Harding, 1996b). In the light of recent environmental conflicts and the increasing range of*

*complex environmental problems challenging science, the appropriateness of traditional scientific methodology for such situations has come under scrutiny.”*

*Harding (1998)*

Harding (1998) makes the point that potentially valuable information may not be published by scientists because of uncertainty (in the scientist's mind) as to the reliability of the information. This may not be a trivial matter, with the scientist forced to use his or her judgment as they weigh the many pros and cons before making such a decision. It would seem, for number of reasons, that the pressure is on the scientists not to reveal their concerns or *uncertainties*. It has been argued elsewhere (Roberts 1993) that even when scientists report their findings, clients or sponsors can still use the information in a 'selective' way to support their case. The fact that scientists are not encouraged to express their concerns and uncertainties in the context of their research may well represent yet another 'Achilles Heel'. The consequences for legislation may be quite serious as such judgments and concerns could form the basis for statements of *precaution*.

### ***Science and the human factor***

All research has limitations - all theories are provisional. We can never be certain, yet we see that expectation in laws and regulations. However the underlying uncertainty is revealed when authorities say, "we can't be sure whether or not there will be an impact...". It would seem even when science and business believe they have 'got it right' there might still be doubts and uncertainty.

Harding's comments above fall short of acknowledging the role of vested interests in shaping the outcomes of scientific process (Roberts 1993). These interests can, I argue, make 'good use' of any, so called 'uncertainty'. Depending upon funding and career opportunities scientists may be swayed in their judgment<sup>24</sup>. This represents yet another potential 'Achilles Heel'.

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<sup>24</sup> By this I mean the way in which the research "problem" is worded, who is funding the research and who will publishing the research findings. In this sense individual scientists may not be solely responsible for censoring or suppression of research programs, projects or results.

Indeed, it is reality that all research, being a product of human activity, will be subjected to prevailing influences within a given context. A further ‘Achilles Heel’.

The following footnote from Gerald Midgley’s book is illustrative of such problems, which echo the concerns expressed by Roberts (1993);

*“...George (1976) for a shocking indictment of the effects of scientific research supposedly undertaken in the name of third-world agricultural improvement. Essentially, scientific research conducted in laboratory conditions has led to the development of ‘better’ crops without taking into account local knowledge of the ecosystems in which they are to be introduced. George also highlights the business interests that are served by this kind of research at the expense of meeting the immediate needs of subsistence farmers for whom lower-tech solutions to their problems may have been more appropriate. In the context of agricultural development in Mexico, Rose (1988) suggests that ‘science is only as good as the political and economic system in which it operates’...”*

*Midgley (2000), pp. 180-181*

A further ‘Achilles Heel’ is to do with the treatment of scientists within certain institutions. According to Martin (1992), intellectual suppression and manipulation do occur in science. He cogently argues there is every reason to suspect that the institutional context does play an important role in shaping the behaviour of scientists, or for that matter anyone dependent upon funding sources. This was touched upon at the end of Harding’s first point above. Like any of us, scientists are ever watchful for threats and opportunities for the progress of their career. Therefore, much is at stake for the scientist who wants to speak out or raise concerns over the way in which scientific findings are to be used.

These problems cannot be ignored and are a formidable challenge for those who seek change to the way “science is done”.

## **The Move Towards a New Science**

It could be argued that the move toward a more inquiring and critical community is underway here in Tasmania. We have seen in the last decade a rapid growth in what could be regarded as community based science and activism (Alexander et al 1996). In Tasmania we have seen the Tasmanian

Environment Centre, Tasmanian Conservation Trust, Community Based Sampling (the forerunner of Waterwatch) (Tattersall 1991), Landcare, the rise of organic agriculture, Waterwatch (1995), Community based forest practices audits (Gschwendtner et al 2001) and a raft of community based actions and projects as exemplified by the *Tas Together* process. This increased community based activity mirrors that found elsewhere around the world. The danger is that in arguing their case, the vast majority of community based models continue to follow the lead of *normal* science. Environmental activism for example tends to utilize the “canons of good science” as actors seek to prove their case on all sorts of issues. White (1993)<sup>25</sup>, in the context of a general discussion about the environment movement in Australia, has raised concerns, stating that:

*“The environment movement has tended to use scientific arguments ...indeed it is very difficult to do otherwise, given the pervasive nature of the assumption (underpinning science) ...The dominance of scientists and this mode of science, however, can limit the environment movement in the following ways:*

- *Focus on problems rather than solutions, the focus of research tends to be very narrow...*
- *Scientific arguments are vulnerable to counter-arguments. An over-emphasis on a single scientific argument in an environmental campaign can cause the whole campaign to come unstuck if new scientific studies indicate contrary results...*
- *It can obscure the strength of an appeal to the public sense of what is right or wrong based on sound intuitive reasoning... (no amount of 'reasonable' scientific 'proof' should be allowed to get in the way of a persons/community's right to say 'no'.)*
- *An inevitable focus on the quantification can often be at the expense of the important, if it can't be measured.*
- *Science is unfortunately still a male dominated arena and so exclusive emphasis on scientific arguments and reliance on scientists in an environmental debate often becomes a contest between men and masculine values, reinforcing the imbalance that exists in other parts of our society.”*

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<sup>25</sup> Note, the non-italicized text is my additions and comments.

White proposes a community-based science, claiming it would be more responsive to the needs of the people. Examples of science shops and the Skills Bank of the Society for Social Responsibility in Engineering are given as examples of ways in which the community can interact with science. White also proposes that scientists need to assume the role of change agent and, in so doing, work more closely with community members. The central theme of Whites paper is similar in many ways to what I have suggested in this paper. I propose some different ideas for a way forward, which I will discuss later. Below I will explore some of the issues activists and community face when attempting to ‘fight science with science’.

The formal process by which community members and activists have to voice their concerns is through submissions and other input (letters to politicians and legal action). A lot of very good work with the production of reports, submissions and investigations is done by activists, many of whom are scientists. Over the years I have seen community activists and scientists relentlessly labouring away, writing elaborate submissions and attending government hearings or tribunals to make lengthy in-person submissions only to be largely ignored or have their concerns labelled as anecdotal or based upon emotion and therefore of limited value. Most of the time though, these tireless workers receive very little follow-up or acknowledgment for their work. The reasons are, in my experience, more to do with the fact that, calls for ‘submissions’ are merely yet another move to keep the public away from any real control over the decision-making process.

For some time now the community and its advocates (the activists) have had limited ability to influence the science that underpins the decisions contained within project proposals or legislation. No real opportunity exists for inquiry into the quality of the science (including degree of uncertainty, extent of value judgment or assumption) or to examine issues such as potential vested interest or possible corruption. Usually the scope and terms of reference of calls for submissions are carefully crafted in order to disallow any probing questioning or inquiry. Any chance then of bringing community into the core of the review process simply does not exist. For a community with serious concerns the only options are protest or call for the science to be ‘re-done’. In any case these are the core issues of concern, where all the factors or ‘Achilles Heels’ come together to limit

the power of the community and their advocates to rigorously review the proponents decision-making process.

Clearly, any way forward out of this maze of problems will need to be carefully thought through. First, community members must be able to understand what the problems are and why they are important. Second, they must be able to use the solutions they have helped to develop.

At this point in the discussion a number of interconnected problems are evident, that when put together tend to impede moving to a ‘new science’. The first relates to the nature of science and the ways in which it informs the law in the contexts of the perceived need for certainty. The second is to do with the apparent perception that community is somehow incapable of generating valid knowledge and must be guided and spoken for at every opportunity. The third relates to the need for new approaches to activism<sup>26</sup> capable of facilitating community involvement and ownership.

### ***Bringing Science and public participation together***<sup>27</sup>

I begin by exploring ways to increase participation, and yet at the same time, take account of uncertainty. In short, what properties would a “new science” have? Harding (1998) suggests:

*“Managing uncertainty and factoring in value inputs and broad public participation into the decision-making process is central to the ‘new science’ which has been referred to as ‘Post-normal’ or ‘vernacular science’ (Funtowicz and Ravets, 1991; O’Riordan 1991b). Post-normal science increases the emphasis on, and acknowledgment of, varying paradigms, uncertainty and subjectivity which are inherent in all forms of science. It acknowledges that dealing with uncertainty or short decision-making time frames while attempting to resolve complex ecological issues, requires the incorporation of a broad range of inputs. These inputs include the extension of peer review to incorporate a wide selection of expertise, wider set of stakeholders and the inclusion of alternative knowledge bases (such as local and indigenous knowledge) and values.*

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<sup>26</sup> It is without doubt that activism will remain a vital tool for initiating important social change well into the future. The ‘close relationship’ between governments and business will remain so for quite some time, where community goodwill and tax money will be used to continue with business as usual. The case for good governance is clear (McCarthy 2003).

<sup>27</sup> See also Wilsdon and Willis (2007)

*In situations where post-normal science is appropriate, wider participation will require that the public has meaningful access to the decision-making process. This will require that the scientific information is communicated to non-scientists in a form which can easily be understood and that the limitations of science in addressing the issue and associated uncertainties are given prominence...". See Appendix 1 for a fuller explanation of Post Normal Science.*

One of the key ideas in Harding's discussion relates to the expansion of the peer review process through community participation. This will require great effort and innovation on the part of community and its facilitators. Harding also sees an opportunity to bring in uncertainty and subjectivity, seeing these as inherent in all forms of science. While I would agree with Harding's ideas, one wonders how such a new science would be implemented, particularly given the many 'Achilles Heels' described earlier in this paper. In my view innovative forms of activism will drive the ensemble of changes. I will discuss this in greater detail later on. But let me discuss another 'Achilles Heel', before moving on.

The issue not addressed by Harding relates to power and ethics. Given the moral tilt toward deception in much of conventional positivist reductionist science (Guba and Lincoln 1994, p.112), there will always be issues relating to the use of new knowledge and discoveries. The ethical use of power is a very important aspect of "doing science" for both scientists and the communities they support. Scientists themselves will need to be open to new ways of communicating knowledge (Martin and Beder 1993). The community will also need to be aware of the importance of the *wise* use of knowledge. Knowledge must be used carefully and in an evenhanded way, not as a weapon to deride or humiliate those perceived as the *opposition*.

As time goes on scientists will take on an activist role and will be supported by innovative community activists. Radical science and community activism can go hand in hand. Martin (1980) has outlined some interesting ideas regarding an expanded role of science to include participation by larger fractions of the populace. Of course the 'Achilles Heels' of vested interest and institutional norming will have to be sensitively negotiated. In the end though, I believe our communities will not have a choice due to the growing urgency of the complex and serious situations we now face. AIDs, global warming, population growth and dealing with the myriad of issues resulting from the interactions among

these three key crises will require wholistically based solutions and above all co-operation.

### ***Some ideas for change***

More and more we will see scientists playing the role of facilitators and mentors, and using participatory methodologies such as action research<sup>28</sup> and action learning. Science is undergoing some important changes (Weingart 2002). As we continue to engage with the complex concept of sustainability there will be a gradual redefinition of the term “expert”. This will come about in two ways. First, there will be improved understanding of the true nature of learning (as opposed to teaching) (Ison 1990), and the many ways knowledge can be expressed. Second, through sheer necessity, science will move from the domain of the privileged few to a task of the many, as more and more citizens become involved in not just *doing science*, but reviewing its progress as well. This is where the *new activism* will play an important role as we continue to deal with the reality of uncertainty and issues of power and control.

Changes to the methods for formulation of legislation and resource planning will also be needed. We need to find ways to incorporate the principles of sustainability into the very codes and protocols themselves rather than, as tends to be the case now, merely placing of such statements in the preambles to numerous Acts. At the same time, resource-planning systems need to be modified to include participation in the initial stages of development proposals. This could be achieved through community working groups, perhaps as part of the roles of Waterwatch, Landcare and community environment groups. For instance, Waterwatch groups could be part of planning application and review committees within local and state governments on issues relating to water management. Likewise, Landcare groups could also enter into similar arrangements. In this way Waterwatch and Landcare could take a more strategic role in local resource management and decision-making.

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<sup>28</sup> A methodology for inquiry that lends itself to participation. Specialists and community members are joint inquirers and co-learners about a problem situation. Planned action is undertaken on the problem. The results of the ‘action’ are reflected upon by the co-learning group, who then plan the next action. The group works its way from understanding the problem to proposed solutions in an iterative process of Plan-Act-Reflect. As important though is the learning that is undertaken at the personal level as participants reflect on and discuss their own learning. Personal growth and improved competence is thus possible using this methodology. The specialist becomes the facilitator (change agent and co-learner) who exits the group when it decides it’s time.

## **Reinvention of Activism – the challenge on behalf of the community**

In this section of the paper I will show that innovative forms of activism are needed and that only through an examination of activist styles will it be possible to develop new ways of facilitating community based change. I will begin by discussing the various styles of activism. I will then discuss the community and environmental management in Tasmania, before discussing activism in Tasmania. Finally, I will outline some ideas regarding the future role of environmental activists in Tasmania.

### ***A typography for analysis of activist styles***

The following typography will assist us in the interpretations put forward later in this paper.

In this paper, the term “activist” refers to a spectrum of approaches used by community members in bringing about social change. Carson, 2001 (after Moyer 1990) discusses the various activist roles of citizens in community change, referring to the “Effective Citizen” as one who promotes positive values, democracy and freedom. The “Effective Reformer” uses official mainstream systems (e.g. law, policy change etc.) to progress the movements’ values. The “Effective Change Agent” works with “people power” to educate and convince, leading to paradigm shifts. The “Effective Rebel” uses protest, saying “no!” to violation of positive values. Moyer 1990 (quoted in Carson 2001) argues that all roles are essential for social change and that roles are interchanged throughout our lives. Each of these activist roles also has an “ineffective side”. The “Ineffective Citizen”, for example displays unquestioning acceptance of official policies. The “Ineffective’ Change Agent” promotes visions of perfection, displays tunnel vision on issues and ignores personal issues and the needs of activists. The “Ineffective Rebel” is anti-authority, anti-organizational and tends to use radical methods. The typography of Moyer used by Carson (2001) continues to be a useful tool in the early stages of my research.

Carson (2001) sees a shortcoming in Moyer’s classification, and in collaboration with Kath Fisher identified a further role, thought to be of fundamental importance, namely the “Effective Inquirer”. The “Effective Inquirer” asks strategic questions, promotes the need for genuine inquiry,

can include participatory approaches, engages in active listening and evaluates the issues of power, representation and accountability.

### ***The community and environmental management in Tasmania***

In my view, the broader community has been “spoken for” and “on behalf of” by a number of “vested interest groups”. The governments, political parties, industry and environmental activists all feature as key vested interests, each with their own agendas, each vying for the community’s imprimatur. The art of securing the imprimatur involves a complex balancing act, the upshot of which is being seen to “have support”, while at the same time, “getting what you want”. In doing this the vested interests enlist the support and input of a selected public at the tactical level, while they themselves make the key strategic decisions. Once getting what they want the vested interests can then claim “*wide community support*”. In this role community members feel valued and that their actions “mean something”. At the same time, there can be a feeling that “things are not quite right”, and as one community group member said to me, “*we have been just given the run around and kept off the real issues...bloody hell that makes me mad!*” (Kim Eastman, Dorset Waterwatch Chairperson, *pers comms*, Saturday August 30, 2003 at a Tasmanian Community Resource Auditors Inc. workshop).

In a sense the Tasmanian Community has been used by various vested interest groups. In many ways the community has played the role of ‘ineffective citizen’ as described by Carson (2001).

The vested interests within activism, government and industry have in my view, exploited the community. Some have exploited to simply secure funding to meet institutional needs and others to secure public resources such as forests, public water supply and publicly funded infrastructure for the purposes of meeting industry’s needs (e.g. water pipelines, roads, bridges, power supplies<sup>29</sup>). There have also been cases where industry and government have overstated the significance of projects in terms of employment and other benefits<sup>30</sup> in order to press the public into

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<sup>29</sup> Note, for many of these the public has access to their use, but pays a premium, examples include water and electricity.

<sup>30</sup> The recent pulp mill proposal for the Tamar Valley is a case in point where promises of income and employment were made, while de-emphasizing the huge volume of water that would be used and the high infrastructure costs that the community would have to bear (e.g. road and rail construction and repair).

acceptance, or simply threaten the public that if industry could not get its way it would move its operations elsewhere. In the next section, I will explore some of the reasons for the ‘ineffective citizen’ (Carson 2001) situation I believe continues to exist here in Tasmania.

### ***Problems with the foundations of Tasmanian culture?***

I feel the causes of the ‘ineffective citizenry’ are to be found in our past. To my mind, it is without doubt that Tasmania’s despotic and violent<sup>31</sup> past has played an important role in shaping our culture and identity.

It is worth mentioning that Tasmania was first and foremost a penal settlement, where the military, church and government, along with the free settlers, held power over the convict slaves transported from England during the early 1800’s.

Ultimately slaves (convicts) were freed, becoming Emancipists. Many Emancipists were given the poorest land well after the Free Settlers (Exclusives or ‘pure merinos’) were established (usually via convict labour). Williams (1961) discusses the events of the day (mid 1800’s) that set the scene for what was to follow. The focus of his analysis is the colony of New South Wales, which had jurisdiction over Tasmania at the time. He has this to say about the relationship between the Exclusives and the Emancipists:

*‘The latter (Exclusives) would not accept Emancipists as equals; and because of this, Macquarie’s ideal of bringing ex-convicts back into the colony’s life as equals of all other men caused much friction. The exclusives resented ex-convicts being made magistrates and were disgusted when invited to dine at Government House in the company of freedmen...’*

*Williams, 1961*

In my view, this ‘schism’ led to a deep rift between the Emancipists and the Free Settlers, which set the scene for the development of a socio-political culture where the ‘real’ power (and resources) remained in the hands of a few families, and led, over time to a unique cultural ‘norm’ and

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<sup>31</sup> Examples include the campaign to take the land away from the original inhabitants and land owners, the Tasmanian Aboriginals and then the plot to exterminate them under a bounty system. In my view this despicable act by the supposedly civilized society of England has never been properly resolved.

identity. Tasmania's geographic isolation served to reinforce what I term a 'post colonial colonialism'. This 'cultural norm', characterised by imposing fear and intimidation on those with differing or counter views, persists today (Flanagan 2007).

This norm is evident in the way natural resources continue to be 'managed', particularly the forest industries where there is believed to be a culture of control and intimidation (Flanagan 2007). This all-pervasive culture of fear has also shaped the environment movement's reaction to what it sees as environmental injustice. In short, our past continues to function as a kind of 'strange attractor'<sup>32</sup>, shaping our responses and therefore the trajectory to our future.

I argue that the above has contributed to the present crisis that sees communities<sup>33</sup> effectively disconnected from any real means of control or say over their natural resources.

In any case, further research is needed to explore these assertions to a greater depth and in more detail.

### ***The present role of the environmental activists***

I argue that "environmental activist" groups here in Tasmania have, for many reasons, failed to fully connect with community. I believe the understandable quest for political power has occurred to some extent at the expense of community empowerment and issue ownership. I also assert that environmental activists have largely missed the real target of environmental reform. There has been a tendency, brought about through a sense of urgency, for activists to become engaged at the level of "preventing" or "stopping" this or that project instead of mounting critical inquiry into the decision-making processes leading to project proposals. At the same time, there has been a reluctance by the activists to seek engagement at a more strategic level, in order to lead decision-making processes inclusive of the community.

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<sup>32</sup> Applied to the humanities, the term 'strange attractors' not only suggests the influence of chaos theory and intersections with scientific theory, it also raises images of unlikely combinations, emerging connections and unstable meanings. < [www.limina.arts.uwa.edu.au](http://www.limina.arts.uwa.edu.au)>.

<sup>33</sup> Community expectations are slowly changing due to education and the influx of people from overseas and mainland Australia. That said, I have found a strong feeling among Tasmanians that is expressed in terms of "don't rock the boat", "we have to go along with our political masters", "what can we do – it will never change", or "but they say we'll lose our jobs..."

As indicated earlier, there are many causes for what could be seen as lost opportunity on the part of the movement. First and foremost, committed activists are “thin on the ground” and those with time and resources to function as much needed change agents are much thinner. There may be another factor contributing to what appears to be a breakdown of the relationship between environmental activists and the Tasmanian community. This could be associated in part with the perceptions, beliefs or assumptions held by the activists. Carson (2001) suggests: “*Activists, like bureaucrats and elected representatives, are often sceptical about the ability of citizens to handle complex matters...Activists are often contemptuous of citizen’s ability to come up with the ‘right answers’...*”. Some would argue that Carson is tending to draw a “long bow”, while others may find that, for some reason, the environmental movement here in Tasmania has tended to play the role of “Ineffective Change Agent” and “Ineffective Rebel” (Carson 2001). An exploration of this could throw light on the reasons<sup>34</sup> why concerned communities often see the activist methods as off-putting, due to what some see as an over reliance on reactionary approaches. In addition, the ‘ineffective citizens’ may, for the reasons given earlier, find the activists messages hard to grasp, due to deeply held perceptions within the Tasmanian community toward power and authority. There are also other influences that may be contributing causes to the ‘lost opportunity’ referred to earlier. In what follows, I expand on the discussion introduced in the first section of this paper.

Christoff (2005), in his analysis presents a number of cogent arguments regarding the performance of the environment movement in Australia. He cites the progressive changes in public concern regarding environmental issues. He states that in 1992, 75% of Australian had concerns about environmental problems. By 2004 the figure was 57%. The possible causes for this include: efforts by the current Federal Government to neutralize<sup>35</sup> environmental critique, lack of interest by the media, or the public perception that the urgency as largely over. He suggests that the message

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<sup>34</sup> Partly the subject of PhD research by Philip Tattersall

<sup>35</sup> Christoff says, “The Howard Government supports industry and ‘grassroots environmental; groups’ with practical *raison d’etre* such as ‘repairing the land’, while attacking ENGOs which are primarily advocacy groups, describing the latter as organizations that ‘do nothing’, do not act ‘in the public interest’, are ‘unrepresentative of public opinion’, are ‘merely political’. Consequently, these ENGOs are regarded as unworthy of public funding, may soon be deprived of their status as charitable organizations and, in some cases, are refused access to national political and policy circles.”

put out by the environment movement may not be getting through. Either way, he argues that (based on poll data) the Australian Environment Movement's issues (e.g. biodiversity, wilderness, land and river degradation) are strongly out of step with popular opinion about what is important (Christoff 2005). In many ways I think Christoff is right. It is clear that at the National level there has been a campaign to shut down<sup>36</sup>, (via social engineering) environmental advocacy groups. The recent advent of legal action against activists has also had an impact on the effectiveness of environmental groups. In terms of attempts to shut down the movement here in Tasmania, similar strategies are afoot. That said, to ignore the important cultural aspects when looking for new ways forward would be foolish.

No doubt the Tasmanian community has been deeply affected by the relentless campaign of hatred levelled at the Tasmanian Greens and the Environment movement generally by the major political parties and sections of industry. The 'outbursts of authority' claiming that the Greens and the Movement are anti-jobs, anti-development and are seeking to shut Tasmania down have, without doubt, intimidated ordinary Tasmanians to the point where they see the Environmental Movement and activists through the lens of fear and mistrust. In such a climate, the vested interests could, I argue, inflict just about anything on the Tasmanian Community and it would accept it.

In many ways those seeking to bring about change here in Tasmania face some unique challenges. I argue that the general theories of social change and indeed activism may have limited application. Tasmanian society is, in my view, a special case requiring much innovation on the part of those of us seeking change.

### ***The future role of activists***

The key belief underpinning my assertions regarding activists is that they are acting in the interests of community and the environment. As such they are advocates and therefore an essential thread within our democratic fabric. Activists have a watchdog or surveillance role as well as a role in

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<sup>36</sup> In my view, this is being attempted through a series of complex strategies aimed at facilitating a shift in the values of the Australian community. This is principally done through political means via the instrument of popular appeals through mass media.

supporting communities and citizens in matters of justice, including environmental rights. As important as those matters are, I believe that activists also have other responsibilities too. The key responsibility is to act as facilitator and mentor for community based change. I argue that more than ever we need to find ways to ensure that community takes an ever-growing role in the development of its future. In short, community needs to be taking on a leadership role, doing the telling, instead (as is the case now) of being told what to do<sup>37</sup>. Clearly this will require enormous effort on the part of those seeking meaningful change, particularly in light of Christoff's (2005) analysis and the cultural reality in which Tasmania finds itself. The primary role of the activist movement is the facilitation of an *inquiring community*. In their efforts the activists will facilitate a social change that can embrace new tools and new ways of *doing science*. I believe that Post Normal Science (Gallopín et al 2001) will play an important role in the change process as activists begin to see its application as beneficial. Post Normal science is, in the end, simply science with a stronger social dimension.

As the activists begin to innovate, vested interests will shy from the challenges they face, particularly where it is clear that placing too much power in the hands of the citizens may dilute their own opportunities. Once the vested interests get wind of the new way forward there will be, without doubt, the predictable 'outbursts of authority' in order to intimidate the community once again. It is vital for the movement to develop change strategies that see them as leading the process of environmental reform. Activists need to be innovating new ways to 'bring community in' and at the same time neutralize the assertion that the activists 'do not act in the public interest' or are somehow 'unrepresentative of public opinion' (Christoff 2005). Careful use of well-designed surveys to secure mandates from the community is one way activists can nullify such claims. Indeed, from here on all campaigns should start with a survey and campaigners should be very careful to keep their concerned community informed of progress against the mandates.

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<sup>37</sup> Zoretic (2006), (quoting Moyer 1990) argues that citizens do have extensive power, as it is they who decide whether politicians get re-elected. Zoretic argues that it is not the politicians that activists should be targeting, rather they should aim to influence citizens instead (Zoretic 2006).

## **One Example of Applied Post Normal Science<sup>38</sup>**

Community Based Auditing (CBA)<sup>39</sup> seeks to bring community members together in order to share their concerns on specific issues and to critically inquire into causes and effective solutions. CBA uses a formal auditing framework to create a structured environment for inquiry. The inquiry methodology is based on participatory action research and enables participants to undertake their own critical inquiry (Gschwendtner et al 2001) and is an attempt to bring the community into decision-making processes. I see this as a sequel to Community Based Sampling (Tattersall 1991) where members of the community were trained to undertake their own sampling for the purpose of environmental surveys.

### ***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. In addition, it attempts to guide and facilitate individuals and groups through the maze of options open to them as they seek to be heard, listened to and supported in their efforts to influence decisions they believe will affect them.

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’.

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<sup>38</sup> I term this methodology of inquiry Post Normal Activism as it takes present forms of activism to a new place in which individual citizens undertake inquiry on many levels.

<sup>39</sup> Community based Auditing is the brainchild of Philip Tattersall. Formed back in 2001 the Tasmanian Community Resource Auditors Inc. has assisted and trained several community groups across Tasmania in the science of resource base auditing and publication of reports. The methodology is discussed in detail in Tattersall (2007).

### ***Summary of experiences over the past 7 years***

Over the past 7 years CBA has had some 11 cases covering issues such as water pollution, forestry management practices, threatened species protection, protection of public forests, water management and catchment risk assessment. In nearly all of these cases, groups and individuals came to us<sup>40</sup> as they had nowhere else to turn. This has led to the publication of 14 audits involving some 200 people.

For those affected there was a feeling of frustration as they felt let down by the authorities, politicians and the movement. We were told many times how community members in Tasmania often simply gave up due to the run around they were given by the “authorities”. Many felt that such tactics were a deliberate campaign to exhaust and confuse. Our work has shown that community is in need of activists capable of facilitating non-political and non-aligned support. CBA has no vested interest, institutional commitments or allegiances. This means that the goals of the community are first priority. In short, the community’s ‘cause’ is not used as a stepping stone for other ‘agendas’ or goals.

### **The origin and Initial Development of Community Based Auditing (1999 to 2003)**

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<sup>41</sup> during 2000.

Tasmanian Community Resource Auditors Inc. (TCRA) was formed 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

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<sup>40</sup> Strategically it is vitally important to ensure that the community ‘comes to the activist’, thus creating the situation whereby the activist has been ‘tasked’. This must be explicit. This can be triggered by a survey or through advertising a ‘service’. This will serve the movement well, as the claim cannot be made that the movement or activists are ‘not acting in the public interest’. If such a claim were to be made then the aggrieved parties could seek their own legal action/s.

<sup>41</sup> The inspiration and innovation on the part of my colleagues Kim Eastman, Peter Eastman and Ann Gschwendtner were a big part of getting the idea off the ground. Kim in particular has played a vital role as mentor and co researcher.

the myriad of natural resource issues we had dealt with over a collective period of some 50 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. TCRA Board members all recalled instances where industry and government referred to community members ‘as non-experts’ or ‘lay persons’, inferring those citizens would find it difficult to understand complex matters. More extreme examples included situations where governments stepped in and changed the law when community expectations differed from the direction in which government and industry wanted to go<sup>42</sup>.

Further discussion and reflection within the group revealed that concerned citizens were treated in one or all of the following ways:

- Outright dismissal of citizen’s concerns by institutions and authorities;
- 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;
- 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;
- Citizens threatened or intimidated in order to coerce them into dropping their concerns;

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<sup>42</sup> 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 Tasmania (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.

- 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;
- Environmental NGOs (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 community<sup>43</sup>.

The group 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

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<sup>43</sup> 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. The unfortunate upshot of all of this is that the community is open to possible manipulation while ever these conditions exist. In short, the waters are continually muddied, as vested interests claim to be acting on behalf of communities who, some of the time at least, may have simply 'tuned-off'. Once that happens the scene is set for overt exploitation by vested interests. Indeed the recent pulp mill proposal for the Tamar Valley has highlighted just that<sup>44</sup>. In that case, the government, its opposition<sup>45</sup> and industry were colluding to push the proposal through, supposedly on behalf of the Tasmanian community. This has led to a conundrum of problems and dilemmas in relation to democratic and due processes, leading to further divisions and deep conflict within the Tasmanian community.

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 and at the same time provide technical support to concerned citizens. This was an important turning point for our group.

Having identified what we felt were the main problems 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. While there was evidence that CBA was beginning to take off, we still had

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<sup>44</sup> See Richard Flanagan's article, 'Out of Control', published in *The Monthly*, May 2007. Flanagan discusses how a corporation attempted to shut down democratic community process in Tasmania. He also highlights a conspiracy between industry and governments to secure publicly owned forests and put in place a multimillion-dollar pulp mill with the public allowed little or no say.

<sup>45</sup> Except the Tasmanian Greens, who have continued to oppose the mill proposal.

to work on a case-by-case basis, slogging through the maze of issue 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. By mid 2003 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, the communities expect absolute guarantees that management proposals would not lead to negative impacts on community or the environment. Industry expects to see approval for projects once the necessary requirements of regulations had been met. The governments expect ‘best practice’ and that its 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. 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, which in turn led to the further development of the philosophy and methodology underpinning CBA.

## **The further development of Community Based Auditing (2003 to 2007)**

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 Community Based Auditing***

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. Indeed, there are traditions within the paradigm that advocate empowerment of workers and citizens generally. The case is made for ‘ordinary’ people as experts, charting their own course and setting their own destiny.

CBA has two parts: the auditing process, or the ‘hard science’ part, where data is collected, measurements and comparisons are made. The second part is the soft science part, where views, perceptions and emotion enter the process. In this part provision is made to support the growth and development of participants, including the facilitators. 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, based upon a rigorous search for disconfirmation. I shall elaborate on these matters below.

### ***Methodological basis of Community Based Auditing***

The Community Based Audit process uses an action research approach to guide participants as they *plan-act-reflect* (Reason 1994; Heron and Reason 1997). The action research<sup>46</sup> process is a cyclic process that involves joint

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<sup>46</sup> 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 opportunities for team members to

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 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.

Appendix 2 presents further details on CBA, including the training program developed by TCRA coordinators. Training is provided to individuals and community groups on a donation-as-payment basis.

## **Conclusion**

I will address some general conclusions before going on to those conclusions of direct relevance to the Tasmanian situation.

There are important messages here for community, governments, activists and scientists. As future challenges continue to emerge it is clear that our past methods of engagement will become less and less useful. Based on past experience, our immediate response to conflict has been to “try harder”, “become more aggressive” and/or continue to use the old tools. Those days are fast coming to an end. We are in the early stages of a revolution of ideas, leading to new ‘ways of doing’. As well, a new science is waiting in the wings. I argue that the next scientific revolution<sup>47</sup> will be

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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.

<sup>47</sup> see Kuhn, T. 1970. *The structure of Scientific Revolutions*, 2<sup>nd</sup> ed. Chicago: University of Chicago Press

that of Post-Normal Science, but it will still only be a small part of what is required for the task ahead. Of course, that is not to claim that significant elements of *normal* science are not useful. Clearly they are. Such a revolution will see science and the law come to a new position, but perhaps have a similar relationship to that which exists now – a new form of legal science. There will emerge opportunities for citizens and activists in their quest for a more responsive and reflexive legal science capable of dealing more effectively with uncertainty. These are significant challenges for the activists, who traditionally have been quick to point out the ‘problems’ and have tended, through necessity, to ‘do the telling’. In many ways the activists have come through a pioneering period in their history, but are now on a new beach – in an era where new tools and methods are required. Science is just one of these tools; there are many more awaiting re-crafting or invention.

The Tasmanian culture has been formed out of a complex colonial history that in my view is still unfolding. It is clear to me that significant sections of the Tasmanian community are still suffering the ‘aftershock’ of a long and violent history. This is still acted out today with governments and industry holding the community to the constant threat of shutdowns and business exodus in the event that industry cannot be allowed to continue with its pro-development approach, while enjoying low resource-infrastructure costs (usually at the expense of the community). The bottom line of course is always jobs. The isolation of Tasmania and the reality of the skills base of the workforce mean that many are trapped and feel they must cave in to such intimidation.

Community activists here in Tasmania will continue to play important roles in the creation of a more just and sustainable society. It is clear that considerable change in approach will be needed (perhaps requiring considerable innovation) to meet future challenges brought about by uncertainty. It is believed that a move toward a greater facilitative role is needed to ensure that community takes a more central role in decisions directly affecting it.

While it is without doubt that activists and the movement generally will lead the change process, they will need to undergo a reinvention, part of which will be to gain a far better understanding of the nature of the Tasmanian culture and its communities of attachment. At the same time, activists and the movement need to develop approaches to neutralize the

bases of the political and legal attacks<sup>48</sup> they continue to suffer. Part of the answer will be to seek explicit mandates, which will involve working more closely with community.

Activism in its present form is in need of transformation to a new position I call *Post-Normal Activism*<sup>49</sup>.

These I believe are urgent priorities for action to help us move forward. In this sense the following case study proves instructive.

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<sup>48</sup> These attacks have, in my view contributed to a damaging shift in public perceptions of “activism” and the movement.

<sup>49</sup> That is, embracing the processes within Post-Normal Science and Post-Normal Governance, in particular operationalizing the concept of extended peer review and all that entails (see McCarthy 2003).

## **Part 2: Community Intervention Case Study**

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### **Introduction**

It was 2003 and Dorset Waterwatch<sup>50</sup> was having a big year. In the space of six months the group was party to the sign-off of the first Water Management Plan developed for Tasmania, subsequently rescinded its sign-off and ended up, along with other players, before the Resource Management and Planning Appeals Tribunal<sup>51</sup> in a battle over the validity of the science underpinning the Plan.

Overall, it was a pretty steep learning curve for a small group of environmental activists. However, these activists were a little different. Dorset Waterwatch had, as a group, immersed itself in a number of learning opportunities where they had collectively explored their level of effectiveness as change agents, challenged their own long held assumptions, and as a result, stepped into a new awareness of the possibilities for future action.

This case study examines the Dorset Waterwatch Group's journey from simply testing water and generating data to becoming an

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<sup>50</sup> The Dorset Waterwatch Group Inc. is a Tasmanian community group, originally funded as part of the national Waterwatch initiative through the Natural Heritage Trust. Dorset Waterwatch has been unfunded for many years but continues to work voluntarily in order to highlight community concerns on water resource issues, with a particular emphasis on effective community leadership in natural resource management decision making. Dorset is a municipality located in the northeast of Tasmania Australia.

<sup>51</sup> The Resource Management and Planning Appeal Tribunal is an independent statutory body set up to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; provide for the fair, orderly and sustainable use and development of air, land and water; encourage public involvement in resource management and planning; facilitate economic development in accordance with these objectives and promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in Tasmania.

innovative, reasoned advocate for new ways to bring about better and more balanced partnerships between the community and its authorities. The Study explores the processes of learning which the Group undertook and examines in detail one of the actions prompted by the learning that had taken place. The Case Study accomplishes this through unpacking the group's role in a number of decision-making processes, including the controversial Great Forester Catchment Water Management Plan process (ongoing) and the Tribunal case that emerged as a result. It is a glimpse of what can happen when environmental activism goes beyond simply saying "No!"

### **The process of learning**

Dorset Waterwatch was a water group born out of fire. In 1994, the Dorset community experienced two burning issues related to water resources that created a water aware community like few others.

In April of that year, a 3,000 litre chemical spill from a holding dam containing the insecticide pyrethrum and caustic soda entered the Great Forester River from a breach in the holding dam at a pyrethrum extraction plant situated on the banks of the river. The resulting fish and macroinvertebrate kill extended the length of the river below the site to its ocean outfall some 40 kms distant.

In a separate issue only two month later, residents in the small North East township of Derby awoke to find detectable levels of the herbicide atrazine coming out of their taps, following an aerial application of the chemical by state forest managers Forestry Tasmania, upstream of the town water supply.

These two incidents caused serious disquiet in the community. People felt threatened, they were angry, and they began to press authorities for answers to questions that had never really been posed by the community before. Questions like, "Who is actually out there looking after our interests and how do they make their decisions?" The seeds of a critically enquiring community were sown and Dorset Waterwatch grew out of these concerns.

For many years, as a Federally funded group through the national Waterwatch Initiative, Dorset Waterwatch held a strong focus on water monitoring and data gathering and recording, attempting to establish baseline figures for the waterways in the municipality. The collected information fed into such processes as local Council, State of the River reporting, etc. Over the years these processes produced literally volumes of data.

While most waterways were in a good condition, there were demonstrable negative impacts from human activities like farming, forestry, industry and urban runoff. Following a number of incidents where the information collected by the Group failed to make any difference in management decisions by authorities the natural question began to emerge, “What is the purpose of collecting all this data if we are not making a difference?” Dorset Waterwatch had begun the process of examining its own effectiveness.

The group began immersing itself in activities that collectively challenged its perceptions of what it ‘should’ be doing as a group and moved the focus to what it ‘could’ do. We organized a training workshop with the Tasmanian Community Resource Auditors Inc. In this workshop, participants examined the effectiveness of their past efforts, considered what was missing in their performance, and brainstormed a pathway to more meaningful and fruitful ways of achieving desired results.

In 2001 the group facilitated the Diddleum<sup>52</sup> Seminar for Council officials and elected representatives from two municipalities, which brought forward information from local, state and national experts on creating better forestry practices to minimise impacts on water resources. The group’s members faced huge challenges in this process. They needed to carefully examine their own assumptions about what problems and challenges existed in forestry and had to be mindful of not ‘preaching’ to the participants. They needed to look at the issue from the point of view of the audience they were seeking to bring information to. Where were Council officials and representatives on this issue? What challenges and obstacles stood in the path of the elected representatives? How could they create an environment where

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<sup>52</sup> Environmental ‘hot spot’ in North-Eastern Tasmania (Gschwendtner et al 2001).

the participants were offered an opportunity to examine their long held beliefs and explore new options? This challenge to the Group offered great rewards in their own development, singularly and collectively, allowing them to carefully consider their role as effective change agents.

Dorset Waterwatch really had its eyes opened when it participated in the organisation of the “Picnic in the Clearfell” seminar in 2002<sup>53</sup>. This seminar, conducted using Dr. Edward de Bono’s ‘Six Thinking Hats’ methodology, afforded participants from the forest industries, the environment movement and business the opportunity to explore the divisive issues surrounding forest practices. Planning such an event required setting the scene to provide a safe environment for participants to express feelings and recognise commonalities across the divide of opinions. The learning, respect and communication delivered to and by participants on the day extended to Dorset Waterwatch members as co-organisers of the event. The group discovered something very profound. That is, creating opportunities for people to feel secure and heard, this allows for big dividends in communication and understanding. It also provides a chance for thoughts and ideas to surface that people may not even be aware they have.

### *Engaging the community*

With this newfound realisation uppermost in their minds, Dorset Waterwatch members began to ask themselves serious questions. Why were so many people hesitant to come forward with their views and perceptions on how decisions should be made on their behalf? Were they unwittingly conditioned to act out the belief that they were merely ordinary people who should “keep your head down” and shouldn’t “rock the boat”? Were they apathetic and complacent or simply a by-product of a system of top-down information flow so much so that they did not see themselves as capable of swimming against that tide? On the surface, it appeared that the average person was not in touch with their potential to generate new knowledge,

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<sup>53</sup> A seminar gathering of community leaders held ‘on site’ amid clear fell forestry in the North-Eastern highlands of Tasmania to explore commonalities and future directions across a range of competing industries.

create new meanings and get themselves firmly in the driver's seat for a new way forward. In other words, were we the community, content to continue in a back seat role while other players, supposedly advocating on our behalf, both within government and non government organisations, simply took a best guess approach to what we were really thinking and expecting?

Dorset Waterwatch decided to find out. In 2003 they joined forces with a second environment based community group, Friends of the Blue Tier<sup>54</sup>, and began an inquiry into the best method to engage the wider community in order to gain citizens views on environmental management and directions for the future. After much investigation and reflection it was decided to conduct a survey titled, *'Looking After Our Environment in North East Tasmania – What Do You Think?'* (Eastman and Nicklason 2007). There was deep significance attached to the development of the survey material by the two environment groups. The survey represented what may have been a first in their local areas – community asking community for its views and perceptions in a well documented and systemic manner, with the stated objective of reporting back the information collected to the very same community.

The survey was initially conducted by mail-out, followed by deeper enquiry on a face-to-face level with 140 'street corner' interviews. The street corner interviews enabled a cross-checking of the information collected by the less personally engaging means of the mail-out survey and offered the ability for respondents to reflect as they spoke, often drawing them into deeper thought and discovery on the issues. Not surprisingly, many respondents reported that they had never been asked their opinion on such matters before, with some feeling so overwhelmed by the task they appeared to struggle to express a view about the concepts raised.

The results of this combined enquiry, conducted with 293 individuals, were published in the journal *Upper Catchment Issues Tasmania*, (Eastman and Nicklason 2007). The results shed light on what the

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<sup>54</sup> A group formed in the Break O'Day Municipality (situated in eastern Tasmania) whose aim was to advocate for environmental change in resource management on behalf of its community.

community was really thinking in relation to environmental management, including who they believed was responsible for the good and bad things they saw happening around them. They also reported how they felt their own personal views were reflected in the decisions and actions undertaken by the ‘authorities’. Respondents also gave their views on changing or improving the situations about which they had concerns.

Not surprisingly, the results demonstrated that the community was not, in fact, apathetic or complacent about its future, but full of visions and innovative ideas for a way forward. Clearly, the majority felt that there existed a breakdown in the relationship between community and its official bodies and advocates<sup>55</sup>, whom they felt needed to do more to hear and also further include community members in decision-making processes. It was evident that community was calling for greater involvement and meaningful dialogue.

These findings were not discordant with what the Dorset Waterwatch Group felt it had been observing in the wider community for some time. It seemed that the increased community concern and activism, was laced with disquiet over perceived lack of opportunities to have meaningful input into decision-making processes, which often played out on the part of the citizenry as “Why bother? Nothing ever changes!” For its part, authorities and in particular Dorset Council, seemed to face an endless cascade of complex resource management decisions with little opportunity for informed debate and no obvious, identifiable mechanism for accessing community concerns and expectations on such matters.

Dorset Waterwatch considered that the information contained within the survey responses gave the group a warrant to further explore the issue of community/authority relationships. In 2004 Dorset Waterwatch took the innovative approach to establish an inclusive and meaningful dialogue with the Dorset Council via the mechanism of a Memorandum of Understanding (MOU). Firstly, Dorset Waterwatch secured a unanimous decision by Dorset Council to explore the establishment of an MOU with Dorset Waterwatch. The Group then

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<sup>55</sup> That is government (at all levels), environment groups and business interests.

prepared an MOU proposal document to put to Dorset Council Executive representatives to begin discussions.

Dorset Waterwatch considered this to be an exciting opportunity for a long established community environment group to enter into a formal arrangement with local government to open clear, identifiable lines of communication and information exchange on relevant issues.

The Group saw great merit in forging links between community and local government and the creation of an avenue for Dorset Council to access knowledge, information and direction from the community to inform its decision-making processes. Surely this would be seen as a win/win situation! Sadly, it was not. In spite of Dorset Council's elected members unanimous decision to explore the MOU process, Dorset Council's Executive representatives to the process continually stalled progress in the discussions by declaring the exercise to be "resource hungry" and a waste of Councils time. Apparently the message, clearly delivered by our survey respondents, calling for increased opportunities for meaningful engagement with decision-makers, was not seen as important by those placed in positions of responsibility by the community.

#### *A further case*

The Dorset Waterwatch Group took up a number of opportunities to be involved in decision-making processes that on the surface appeared to offer community representatives a say in the development of resource and threatened species management prescriptions. The first was as an appointed member of the Recovery Team<sup>56</sup> for the development of the "*Giant Freshwater Lobster Astacopsis gouldi Recovery Plan 2006-2010*" (Threatened Species Section 2006). Populations of the Tasmanian Giant Freshwater Lobster, *Astacopsis gouldi*, had come under pressure primarily from illegal fishing and habitat destruction caused by land clearing practices in agriculture and forestry. In an effort to halt and reverse the decline in *Astacopsis gouldi* populations, the species was listed as vulnerable and protected

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<sup>56</sup> A Recovery Team is a group of individuals with expertise in a particular flora or fauna, appointed to advise the Minister for the Environment on the development and implementation of a Recovery Plan. A Recovery Plan aims to put management prescriptions in place to halt or reverse the decline of a species listed under Threatened Species legislation.

under a range of Tasmanian State and Commonwealth Government legislation. The Recovery Plan process was initiated in 1997.

As a member of the Recovery Team Dorset Waterwatch, along with other appointed community group representatives, became increasingly concerned by what they interpreted to be stalling tactics employed by authorities when asked to produce research into the effects of logging practices on the recovery of this species. These delays hampered progress of the Recovery Plan development, which blew out to a nine year process. Most disturbingly, the community group representatives were eventually shut out of the Recovery Plan process, with their calls for meetings left unanswered. A communication breakdown between themselves and Departmental<sup>57</sup> officials developed to the effect that Recovery Team members were not permitted to see the habitat management prescriptions (which they were supposedly assisting to develop) until the Plan became available as a public document.

So what was really going on? The Tasmanian Government employs Recovery Teams and Consultative/Advisory Groups as a method of supposedly enabling community input into a range of decision-making processes. But as this example demonstrates, ‘community input’ and allowing the community to have a meaningful say in decisions made on their behalf, may be two different things. Community representatives are generally unpaid and operating in a voluntary capacity, often at a high time and dollar cost to themselves. In this case, Dorset Waterwatch and others advocated for a well reasoned exploration of potential impacts on the species because they believed this position was in the best interest of the wider community. When this position was not given appropriate consideration by authorities, it calls into question the value and motives of such so-called community consultation.

In general, are we being consulted with the goal of providing a snapshot of community perceptions and expectations to inform a decision-making process or being used by authorities to simply ‘tick a box’ in order to fulfil an obligation to have ‘consulted’, however shallowly, with community? This is a weighty question as community,

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<sup>57</sup> Tasmanian Department of Primary Industries and Water.

filled with hopeful good intention, steps time and time again into consultative processes that leave them disenfranchised and disempowered. Little wonder the “Why bother? Nothing ever changes!” mentality has become so entrenched in our society.

How to confront this problem head on led Dorset Waterwatch, in conjunction with *Astacopsis gouldi* expert, Todd Walsh, to conduct a Community Based Audit into the Recovery Plan process and its handling of consultation and communication issues. The audit, called “*Protecting the Tasmanian Giant Freshwater Lobster – Saving the Astacopsis gouldi from the Recovery Plan Process*” (Eastman & Walsh 2006), explored the issues of improper handling of community consultation, questioned the effective expenditure of taxpayer funds and highlighted the need for authorities to recognise the validity of knowledge generated by the community. While the audit itself did not bring about many of the hoped for changes to the Recovery Plan management prescriptions for the species, it proved to play a valuable role in leading the authors, as community representatives, down a path of reflection and deep learning which strengthened their commitment to bringing about future improvements in the Recovery Plan process. As well, it showed authorities that community can develop and present well researched and documented arguments and recommendations for future actions. Not least, through the publication of the audit in a respected journal, *Upper Catchment Issues Tasmania*, a credible, documented version of events surrounding the development of the Plan was then placed in the public domain to act as an accessible record for others to learn from.

### *Progressing the community’s mandate*

The realities surrounding community consultative processes were looming large in Dorset Waterwatch’s vision as they engaged in yet another process, this time as a member of the Consultative Committee<sup>58</sup> for the development of the Great Forester Catchment<sup>59</sup> Water Management Plan (GFCWMP). The express purpose of developing a water management plan was to provide for adequate

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<sup>58</sup> A committee of stakeholders who advise the Department of Primary Industries, Water and the Environment in the development of a water management plan.

<sup>59</sup> River system in Northeast Tasmania.

environmental flow to maintain a healthy aquatic ecosystem while at the same time quantifying the amount of water to be allocated for irrigation, taking into account social, environmental and economic considerations (Water Management Act 1999)<sup>60</sup>.

In 1998 the then Department of Primary Industries, Water and the Environment<sup>61</sup> (DPIWE) (the Department), began a long process of consultation with the community in laying the groundwork for the development of the first water management plan for Tasmania – The Great Forester Catchment Water Management Plan. The Great Forester River in North East Tasmania provides water for the township of Scottsdale as well as for irrigation in primary production. The Water Management Plan was being developed as a requirement of the National Competition Policy<sup>62</sup> under an agreement with the Council Of Australian Governments<sup>63</sup> and in keeping with the State Act (Tasmania 1999).

In 1999 DPIWE released a report on environmental flow requirements for the Great Forester River (McKenny and Read 1999) which sent shock waves through the irrigation community. The report indicated that environmental flows might be required as high as three times the amount that had historically been provided for in the Great Forester River. In the wake of this information, over the next couple of years little progress was made by the DPIWE in convincing the public to form a Consultative Committee to advise the Department in the development of the Plan. In 2002, at a public meeting predominately attended by irrigators, a motion was carried to form a Consultative Committee with weighted committee membership of 60% representation from the irrigation community.

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<sup>60</sup> Water management act in the state of Tasmania.

<sup>61</sup> A Tasmanian Government Department.

<sup>62</sup> National Competition Policy (NCP) is about delivering benefits to the Australian community. NCP reforms are designed to enable and encourage competition. They also address areas that are critical to the long term sustainability of Australian industries. < <http://www.ncc.gov.au/articleZone.asp?articleZoneID=16>>.

<sup>63</sup> The Council of Australian Governments (COAG) is the peak intergovernmental forum in Australia. COAG comprises the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association.

The role of COAG is to initiate, develop and monitor the implementation of policy reforms that are of national significance and which require cooperative action by Australian governments (for example, water reform).

Dorset Waterwatch was greatly dismayed by this development, as it was of the opinion that wider community interests would best be served by a more balanced committee, appointed through a more democratic process than that demonstrated at the meeting dominated by irrigators. Of even greater concern was the fact that DPIWE allowed the creation of a committee that did not generally reflect the make-up of the wider community. After all, the express purpose of a Water Management Plan was to provide for adequate water flows to support both aquatic ecosystems and human communities.

Dorset Waterwatch expressed its concerns about the selection of committee members in a letter to DPIWE, which was never responded to by the Department. Though the Group was frustrated in their attempt to reverse the decision to allow irrigators to vote themselves a majority on the Consultative Committee, Dorset Waterwatch felt it was important to remain within the process and not abandon their obligation to the wider community to have its views expressed. It was in this climate that Dorset Waterwatch took up a position on the Consultative Committee which had a composition of 9 irrigators, 1 Council representative, 1 Integrated Catchment management representative and 1 representative from Dorset Waterwatch.

The Consultative Committee met numerous times and there were many sticking points between parties. For its part, Dorset Waterwatch wanted to ensure rigorous scientific assessment of the pivotal Environmental Water Provision<sup>64</sup> (EWP) provided for in the Plan. Dorset Waterwatch members were concerned that the arguably low historical EWP of 25 megalitres per day was being used as a benchmark by the Department against which to negotiate with irrigators an increase in the EWP, rather than base the new EWP on evidence gained from scientific research. Ultimately the DPIWE declared a new EWP of 30 mgs/per day. The irrigators were unhappy because they felt this was an unacceptable impost on their commercial operations. Dorset Waterwatch was unhappy as it appeared the figure of 30 mgs/per day was pulled out of thin air, with a kind of “it’s better

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<sup>64</sup>The Environmental Water Provision represents the part of the Environmental Water Requirement (the water regime needed to sustain the ecological values of aquatic ecosystems at a low level of risk) which will be preserved to maintain eco-system integrity after negotiation or agreement.

than what it was” attitude from the Department. However, ultimately and with some fatalism, the Dorset Waterwatch representative signed off on the Plan in agreement with all other committee members. With the benefit of hindsight, this move turned out to be a regrettable oversight by Dorset Waterwatch who then took steps to rectify the situation.

In September of 2003, Dorset Waterwatch became aware of a challenge to the legality of the GFCWMP by the Tasmanian Conservation Trust (TCT)<sup>65</sup>, who lodged an appeal with the Resource Management and Planning Appeals Tribunal (RMPAT). Essentially, the basis of the appeal challenged the scientific underpinnings of the Plan and offered a sliding scale of Environmental Water Provisions depending on the month as a substitute for the flat 30 mg/per day figure proposed by the Department.

Dorset Waterwatch held concerns about the new EWP’s being proposed in the appeal, this time by a long standing environment group, the TCT, who were supposedly there to advocate on behalf of the community. Where was the scientific justification for the new figures? To find out, Dorset Waterwatch, along with the other members of the Consultative Committee, signed on as joined parties to the Tribunal action. This move allowed Dorset Waterwatch to the opportunity to contribute further to any amendments to environmental flows proposed during the Tribunal process.

Shortly following the announcement of impending Tribunal proceedings Dorset Waterwatch took the bold and somewhat controversial move to officially rescind the group’s previous sign off of the Plan. In a letter to Dr. Mike Temple-Smith, Manager of the Water Management Branch of the DPIWE announcing the rescinding of the Group’s sign off, Dorset Waterwatch made the following comments:

*“We stress that in taking this action we do not wish to undermine the plan. Instead we seek to demonstrate that it is essential to have appropriate broad based input and balanced process to bring about better community understanding and acceptance for this and*

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<sup>65</sup> A Non-Government Organisation located in Hobart Tasmania.

*subsequent plans being developed around the state. Ultimately, we would like to see a much improved plan, one that is grounded in science and contains commitments to meeting the needs of the environment in balance with, and not subject to, social and economic considerations.”*

The rescinding of its sign-off of the Plan was a serious and somewhat risky move for Dorset Waterwatch. On the one hand, Dorset Waterwatch was acknowledging that it had dropped the ball by signing off when the Group was dissatisfied with elements of the Plan. On the other hand, the Group was taking back a measure of control for themselves and the wider community by taking a firm stand for a more inclusive and satisfactory process. In any case, it was clear other parties, some of whom had signed off on what was a clearly flawed Plan, would see this move as provocative.

Dorset Waterwatch, the DPIWE, along with all joined parties to the action, entered into a round of mediation facilitated by the RMPAT. The mediation was designed to offer an alternative to a Tribunal hearing if parties could agree on appropriate solutions that would satisfy the grounds of the appeal.

Early in the mediation session, the Dorset Waterwatch representative read aloud a statement that instructed her not to negotiate on the Group's behalf on any environmental flow figures put forward which were not demonstrated to be based on good science, as required under the Water Management Act 1999. The Dorset Waterwatch representative asked questions regarding the scientific basis for any of the environmental flow figures proposed at the session and received the surprising answer that the figures proposed on both sides were made up of simply 'best guess' and compromise in the hopes of coming to some agreement between parties.

When mediation concluded all parties were asked to take the proposed new EWP figures back to their respective groups and, if agreed, be prepared to sign a joint communication to the Minister asking him to vary the Plan to accommodate these figures. Upon examining the proposed figures and seeing no scientific justification for the new EWPs as required by law, Dorset Waterwatch concluded that they could not sign off, for a second time, on a water management plan

which they felt was based on flawed logic and poor science. The Group refused to sign and without unanimous support, the amendments were not passed. The matter proceeded to a full Resource Management and Planning Appeals Tribunal hearing.

It was most concerning to Dorset Waterwatch that it appeared most parties, including a premier Tasmanian environment group, the TCT, that was supposedly advocating on behalf of the community, were prepared to 'horse trade' on unscientific figures they hoped would keep them out of a full Tribunal hearing, where they might have less control over the outcome. It was even more concerning to see the DPIWE representatives engaging in this behaviour, given the express purpose of a water management plan is to protect the aquatic environment through science based management of the resource.

At the ensuing Tribunal hearing, the Dorset Waterwatch submission (see Appendix 3) raised many issues of concern encountered in the process. They challenged the appropriateness of the move by the DPIWE in allowing irrigators to self-select the 60 percent irrigator make-up of the Consultative Committee. They highlighted anomalies in the process where DPIWE reports contradicted later actions taken by the Department. As well, Dorset Waterwatch brought to light inconsistencies and inadequacies in the collection of scientific, economic and social data that was required to make informed decisions taken in the Plan.

It is important to note that throughout the lengthy GFCWMP process, Dorset Waterwatch repeatedly made it clear that as a volunteer water monitoring group working on behalf of the community, the Group did not have the expertise to determine at what levels the EWPs should be set in the GFCWMP. They, as well as all parties, could only rely on the information provided by the DPIWE and use their judgement to decide which of it was relevant, scientific and accurate. Dorset Waterwatch still had its doubts.

Clearly, so did the Resource Management and Planning Appeals Tribunal. In its judgment handed down on November 11, 2003 (Resource Management and Planning Appeals Tribunal, File No:238/03 W) the Tribunal states:

*“...the Tribunal is satisfied that the assessments made under the Plan fail in the respects noted above to comply strictly with the requirements of section 14 of the act; that there is presently inadequate scientific evidence available to formulate a plan with any degree of finality;...”*

## **Conclusions**

The three year review of the GFCWMP goes on to this day and Dorset Waterwatch remains active on the Consultative Committee, continuing to highlight areas of the process that lack integrity and workability. In addition, Dorset Waterwatch is working with DPIWE officials to reinstate the Recovery Team for the *Giant Freshwater Lobster Recovery Plan* in order to enable the Team to continue its responsibilities within that process to advise the relevant Minister on matters surrounding the implementation of the Plan.

So what has this long engagement with environmental activism taught Dorset Waterwatch as a group? Persistence, for one thing. Simply hanging in there rather than throwing in the towel at the first sign of disillusionment offers great opportunities for self reflection and self exploration on an individual as well as group level. Many times through the years of community/authority interactions we have had to push through our scepticism and self doubt and do the hard work which has left us with the realisation that as a group we are on a steep learning curve and learning requires effort and commitment.

Maybe the cynics lament, “Nothing ever changes!”, will remain a firm fixture in our reality as long as we keep trying to fix problems using the same tools to that got us into the problems in the first place. Community apathy and complacency (if it DOES exist!) will not be fixed by authorities and advocates offering one more tick-a-box opportunity for community input into issues that are ultimately decided in other arenas with little account taken of public views. The community is unlikely to rise up and become actively engaged with decision-makers when there are few avenues available for them to do so.

Our current top-down governance approach, has ‘processes’ that hold it firmly in place. This was exemplified when Dorset Waterwatch

developed a Memorandum of Understanding to forge community/authority links with Dorset Council, only to find the approach was treated with scant regard by those who supposedly work on our behalf. Our authorities, and even our supposed community based activist organisations, have failed to facilitate and welcome their communities as co-leaders in decision-making, which has led to an ongoing sense of frustration and disconnection within the population.

For its part, Dorset Waterwatch has explored community views and perceptions at many levels through a number of innovative approaches including seminars, workshops, surveys and Community Based Auditing, all in an effort to firstly get the community talking to itself, and secondly move to action. We are not claiming to have all the answers – indeed Dorset Waterwatch has only scratched the surface of the complex issues of community/authority partnerships. However, our contacts with our community have demonstrated time and time again the resilience, resourcefulness and hopefulness with which the community views its future. The sooner community based leadership is fully recognised and embraced by authorities for the asset it represents, the sooner we can begin the real task of building community destinies reflective of our wider collective visions, rather than the visions of a few.

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## Appendix 1

### Post Normal Science

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 characterise 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 . 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. These 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’.*

*Wikipedia the free encyclopedia  
[http://en.wikipedia.org/wiki/Post-normal\\_science](http://en.wikipedia.org/wiki/Post-normal_science)*

## Appendix 2



The purpose of audit training is to provide people with skills in environmental/project auditing to enable them to compare and analyse projects against the stated planning, execution and outcome of the operation. Some examples of what can be audited include:

- The effectiveness of a community action project, i.e. Are key assertions adequately supported by evidence and can statements be substantiated?
- Implementation of a Landcare plan or the effectiveness of a Forest Practices Plan i.e.. Is the plan being implemented as designed? Are there effective safeguards for violations?

An audit can be applied to any operation where an operational plan or strategy has been documented.

The one day workshop is structured as follows:

1. **Introduction to Community Based Auditing.** What do we mean by auditing? Who can audit? Why audit? Auditing in the context of managing your own community based project.
2. **The audit frame work.** To audit we need a consistent reference point, e.g. with forestry operations it would be the Forest Practice Code, the Forest Practices Plan or the Forest Practices Act. With industrial pollution it

would be the Environment Management Plan or project operational plan held by the company and so on.

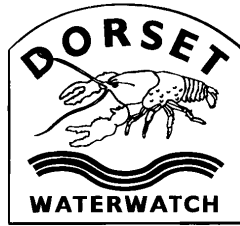
3. **The importance of gathering background information.** Be clear on the reasons why an audit is being proposed, e.g. is there an issue or problem? Is it a matter of measuring how well a proponent has prepared themselves for a project or how committed they are to the projects stated outcome? Answers to these and other questions form an important starting point for the audit.
4. **Making use of experts.** The use of experts to cross check your findings and any assertions you may make in the final audit report. This step is vital in ensuring the validity and professionalism of your work.
5. **What constitutes an audit.** The search for mismatches and inconsistencies (this is very much at the heart of the audit process). Preparing check sheets, what counts as evidence, photographic evidence, quantitative and qualitative evidence, letters of proof and discovery of documents. Production of the report and publication. The media and public right to know.
6. **A Case Study.** The group walks through an actual case study.

The cost of holding the workshop is \$10 per person with a minimum of 6 people. To find out more about this Auditing Training Course please contact:

Kim Eastman Ph: 6352 3429.

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## Appendix 3



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October 21, 2003

The Chairperson  
Resource Management and Planning Appeals Tribunal  
GPO Box 2036  
Hobart, Tasmania 7001

Dear Sir,

Great Forester Catchment Water Management Plan

Tasmanian Conservation Trust v. Minister for Department of Primary  
Industries, Water and Environment

### **Introduction**

Dorset Waterwatch (DWW) support the grounds of the above appeal (Section 28 Water Management Act, Great Forester Draft Water Management Plan, Dorset Municipality, Tasmanian Conservation Trust v. Minister DPIWE), being that “The Plan does not comply with Principle 2 of the *National Principles for the Provision of Water for Ecosystems* (ARMCANZ & ANZECC, 1996) as required under Policy Principle 1 of the *Water for Ecosystems Policy* (Policy #2001/1 of the *Water Management Act 1999*)”.

Dorset Waterwatch has participated at all stages of the development of the Great Forester Catchment Water Management Plan (GFCWMP) since the project started in 1998. We continue to have concerns that the

Environmental Water Provision <sup>1</sup> in the final GFCWMP (DPIWE 2003), as amended from the original *Great Forester Catchment Draft Water Management Plan* (GFCDWMP)(2002)(page 2), does not incorporate the findings of rigorous scientific assessment. It was our understanding that the 30ML/day Environmental Water Provision (EWP) figure (*GFCDWMP* 2002, page 8) represented an interim, minimum, first year “stepping stone” only, allowing irrigators breathing space to consolidate water storage, while the intention was to set incremental increases in the EWP to achieve environmental “moderate risk” levels, as defined in the study *Ecological Flow Requirements for the Great Forester River* (McKenny and Read,1999). It is clear that this was the intent and focus of the original *GFCWMP* (DPIWE, January 2002).

Unfortunately, in the amended numerous draft versions and final draft of the GFCWMP (DPIWE, 2003), the operational period of the plan was reduced from five to three years, taking the focus off long term commitment to achieving “moderate risk” levels. As well, proposed incremental increases in the EWP were discarded for a flat 30ML/day EWP for the operational period of the plan, with no commitment to increases in the EWP without agreement of all stakeholders.

Dorset Waterwatch understands that the *Water for Ecosystems Policy* has determined that EWPs will be set taking into account the ecological, economic and social impacts.

DWW has studied the above McKenny and Read (1999) ecological study, conducted under a risk assessment framework, and noted the potential environmental impacts associated with the adoption of defined “high”, “moderate” and “low” risk EWP levels.

As well, DWW has studied the economic report *Great Forester Catchment – Irrigation and Water Reliability Project* by David Armstrong (2001), commissioned by DPIWE. We did not find this study to be a rigorous and robust analysis of potential economic and social impacts. This was also the conclusion reached by the National Competition Council (NCC) in its *2002 Assessment of Governments Progress in Implementing National Competition Policy and Related Water Reforms*, Vol. 2 - Water Reforms (see attachment 1.). In connection with the Armstrong (2001) report DWW

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<sup>1</sup> Environmental Water Provision is defined in the GFCWMP, DPIWE, July 2003, as “that part of the Environmental Water Requirement that can be met; that is, the water regime preserved for the environment through agreement or negotiation”.

has not seen any evidence of a detailed study on potential social impacts and clearly nothing that has been produced under a risk assessment framework. This, given the general tenor of the report, is clearly an unfortunate situation.

Our concerns do not rest there. DWW has advised DPIWE and the Minister of what we believed to be dysfunctional process in the establishment and composition of the proposed community advisory body, which assisted DPIWE in many aspects of amending the GFCWMP (DPIWE, 2003), including the revising of the EWPs. While we do not intend to make this a focus of this submission, we wish to point out that this matter is now the subject of a community based audit, which will also take in the entire process of the development and current appeal of the GFCWMP. The audit will be published in 2004.

### **Submission**

DWW remains unsatisfied that an adequate risk assessment process, capable of integrating the risk factors for the three areas noted above (namely social, economic and ecological), was used in the revision of the EWPs in the GFCWMP (DPIWE, 2003).

Firstly, as indicated, the EWPs were re-set for the second and all subsequent drafts and the final plan without, it would seem, any clear basis in science. In fact, we can find no clear rationale at all for maintaining a 30ML/day EWP for the operational period of the Plan when DPIWE declared this figure to be “The minimum acceptable environmental flow for the first year of the Plan...” in a discussion paper to the Great Forester Catchment Water Management Planning Group (see attachment 2.).

This is particularly concerning in light of the advice from the McKenny and Read study (1999, pages 23 & 24) which recommended adopting a “low risk” EWP for the protection of the habitat of the threatened species, *Astacopsis gouldi*, the giant freshwater crayfish. The *Astacopsis gouldi* population is in recovery following virtual decimation of its numbers as a result of the 1994 pyrethrum spill in the Great Forester River.

As well, McKenny and Read (1999) call for the adoption of a “low risk” EWP in order to maintain the habitat for brown trout, a priority species documented as important to recreational fishermen in *Great Forester Catchment Water Resources Information Package*, pages 18 & 19, (DPIWE, February 2001). (see attachment 3.) from information gathered at a 1998 *Community Water Values Workshop*. It remains unclear how it was

appropriate to set a flat 30ML/day “high risk” scenario EWP in spite of advice from the 1998 *Community Water Values Workshop* and DPIWE’s own scientific report. In our view, there are serious questions regarding potential liability, as it is clear that the incorporation of the recommendations from the best available science has been ignored.

Secondly, we believe the economic assessment authored by David Armstrong (2001) was insufficient to form a convincing argument that widespread economic hardship was the only likely scenario if “moderate risk” EWPs were met. The report may not be representative in that it is based on interviews with only three irrigators, all very large enterprises and relatively high water users. The study itself does not appear to be supported by a risk assessment framework.

In its 2002 Assessment of the GFCDWMP (2002) the National Competition Council makes the following comments in regard to the Armstrong Report (2001):

“The Council has reviewed the Armstrong consultancy and has some concerns with the report and the possible direction Tasmania may be taking in relation to the determination of EWPs in water management plans.”

“The socio-economic study conducted by Armstrong Consulting is not considered to be a robust analysis of the issue.”

“The return of \$1,000 per megalitre seems to be high relative to returns elsewhere, and the extrapolation of losses to the State seems somewhat tenuous.”

“The Council is highly concerned.....the use of socio-economic studies based on protecting current consumption (is) putting off or watering down the legitimate needs of the environment, resulting in ongoing degradation.”

And finally, “The Council does not want to see EWPs and the water management plan process diluted by the inappropriate use of socio-economic studies.”

An important question arises as a result of this assessment by the NCC. If DPIWE was aware of the critical comments by the NCC in its assessment published in 2002, what actions were taken to correct or clarify any of the socio-economic information disseminated to the public, and in particular, the Water Management Planning Consultative Group? This is a critical point, as the argument for re-setting the EWPs downward from the

“moderate risk” level to “high risk” was largely based on the information contained in the Armstrong report (Armstrong 2001).

Thirdly, it does not appear that any in-depth, relevant risk assessment-based social impact study was conducted, outside of the possibly flawed Armstrong report (Armstrong 2001) and information collected at the 1998 *Community Workshop on Water Values* (see attachment 3.). Had this information been available it would have contributed to the discussions over the balance to be struck between environmental, economic and social impacts in the setting of EWPs for the GFCWMP.

Certainly, if such information had been collected it would have posed revealing questions such as (but not limited to):

Who will pay for restoration works should erosion occur as a result of streambank vegetation decline due to low river levels from irrigation loss?

Who will compensate farmers if they experience financial losses as a result to having to meet EWPs set without adequate scientific assessment and input?

And who will compensate anglers in the event of loss of the Brown trout fishery?

## **Summary**

As a volunteer water monitoring group working on behalf of the community, Dorset Waterwatch does not have the expertise to determine what levels the EWPs should be set in the GFCWMP (DPIWE, 2003). We can only rely on the information provided to us throughout the process by DPIWE and use our judgement to decide which of it is relevant, scientific and accurate. It is interesting to note DPIWE’s own words in a *Report on the Great Forester Catchment Draft Water Management Plan* (see attachment 4.). “Improvements in river health are only expected after there are significant improvements in river flow”. This statement confirms our fears that the current EWPs in the Plan will do little or nothing to advance ecological recovery in the Great Forester Catchment.

For our part, Dorset Waterwatch feel an obligation to the taxpayers, who funded this process, to ensure that the best possible outcomes, which pose the least likely risks to the environment and water users, are delivered. We do not wish to see continued ecological degradation nor have the community face the prospect of compensation payments to irrigators, should the EWPs based on “best guess” rather than arrived at through a

full assessment of the attendant risks, cause material harm. It is also unacceptable, in our opinion, to allow another three years to pass without a firm commitment to independent peer reviewed scientific analysis contributing to the development of all aspects of EWPs in the future.

It seems prudent to deliver what the *Water for Ecosystems Policy* (2001) calls for - Environmental Water Provisions that are reflective of a balance between economic, environmental and social considerations and that bring value and benefit to the wider community who, as always, one way or the other, foot the bill.

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Attachments (not attached to this paper)

1. *2002 Assessment of Governments Progress in Implementing National Competition Policy and Related Water Reforms*, Vol. 2 Water Reforms chapter 7, pages 26 – 28. (National Competition Council 2002).

2. *Great Forester Catchment, Water Management Planning Consultative Group, notes for meeting 19 June 2002*, page 2. (DPIWE, 2002).

3. *Great Forester Catchment Water Resources Information Package*, pages 18 &19, (DPIWE, February 2001).

*4. Report on the Great Forester Catchment Draft Water Management Plan, page 13 (DPIWE, 28 August, 2002).*

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**Table 1** Example citations

| Entry into reference list  | How cited in the text | Comments   |
|--|-----------------------|--|
| Ascherio, A., Chen, H., Weisskopf, M.G., O’Reilly, E., McCullough, M.L., Calle, E.E., Schwarzschild, M.A. and Thun, M. J. 2006, ‘Pesticide exposure and risk for Parkinson’s Disease’, <i>Annals of Neurology</i> , vol. 60, no.2, pp. 197-203.  | Ascherio et al 2006   | A journal paper with more than one author. Note the title of the paper is in ‘...’ quotes, and journal name is <i>italicized</i> . Include page numbers in list. |
| Carson, L. 2001, ‘Innovative consultation processes and the changing role of activism’, <i>Third Sector Review</i> , vol.7, no.1, pp. 7-22.  | Carson 2001           | A journal paper with one author. Include page numbers in list.   |
| Pollak, J. 1993, <i>The Toxicity of Chemical Mixtures</i> , The Centre for Human Aspects of Science and Technology and The Public Interest Advocacy Centre, Sydney, Australia, pp. 5-40.   | Pollak 1993           | A book, one author. Note the title is italicized, followed by publisher details and country of publication. Include page numbers in list.                        |
| Tattersall, P.J. 2003 (a) ‘Community based auditing: empowering the community to take charge – pathways to a just and sustainable society’, in <i>Proceedings of the Community Research Network, 6<sup>th</sup> Annual Conference, powerful Collaborations: Building a Movement for Social Change, October 16-19, 2003</i> , ed. Rick Worthington, Sandstone Minnesota, USA, < <a href="http://www.loka.org/conf2003/2003_conference.htm">www.loka.org/conf2003/2003_conference.htm</a> >. | Tattersall 2003a      | Author cited more than once for the same year. Note the location of the citation is a www. Include page numbers in list.   |

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# Tasmanian Community Resource Auditors Inc.

Our job is about facilitating positive change in others, and at the same time improving our own effectiveness and professional competence as change agents. One of the major challenges facing our organization relates to finding better ways to help community members become more effective inquirers and ultimately competent facilitators of change. The collective experience of our team amounts to over 80 years of practice in self-development and community change. Careful analysis of our individual approaches has led us to believe that *personal change* sits at the very core of any effort to create a more just and sustainable world.

Why is community change important? Tasmanian Community Resource Auditors (TCRA) was formed in response to ongoing calls from the community for a greater role in decisions made on its behalf. While community groups around Tasmania displayed passion and an enthusiasm for change, our numerous interventions have shown us that many groups, despite all the best intentions, are simply not equipped to deal with the complex issues they face. Be they issues relating to water quality, forestry operation, organic food production, community health or crime we see time and time again community groups struggle in their attempts to facilitate meaningful change. In some cases, this can lead to “burn out” and a sense of frustration and disenchantment on the part of community members. At TCRA, we have established a number of innovative strategies to help community groups overcome these hurdles. The process begins by recognizing the strengths, and weaknesses, in the critical thinking abilities we all use. We work with the group members to define and express their concerns, we then delve deeper to explore root causes. We encourage the development of clear, concise arguments that lead the participants to compare problem situations with desirable or improved situations. The issues generated then become the foci of the change processes.

Over the past four years, we have successfully used an approach known as “co-operative inquiry” to help several community groups on their journey of change. The approach, strongly supported by credible research and a wealth of successful community change stories, is simply a disciplined method of sharing ideas and ways to undertake change. One important power of the inquiry process is that it enables participants to explore their approaches to making sense and problem solving. Each of us has a “learning style”, or way of dealing with problem situations. Knowledge of one’s individual learning style can be an important starting point for further personal change. TCRA is about helping others take that step.

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