

The “Science” of Consultation: A Tasmanian Experience

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SUMMARY: This paper looks at the roles that effective consultation and good communication play in a stream management process. It is drawn from my personal experiences with a recent study of flow and catchment issues in the Mersey catchment, located in Tasmania’s central north. There are significant environmental problems in the waterways of the Mersey catchment and this appears to be due to a combination of factors, including agricultural development and diversion of the upper reaches of the Mersey River for power generation. These problems were studied by an interagency working group, which had public consultation at the core of its process. The study highlighted how involving the local community in stream management issues, and ensuring effective communications within the stream management group itself, can both make a positive difference to the environmental outcomes that are achieved.

MAIN POINTS

- Public consultation and scientific studies are both important elements of the stream management process.
- It is worth the effort to create an atmosphere of trust and co-operation in a stream management group.
- Local action from government-based initiatives is more likely to result if public support is harnessed early in the stream management process.
- Involving a professional facilitator with a good understanding of communication management and group dynamics can make a significant, positive difference to stream management outcomes.

1. INTRODUCTION

In August 1996 I was asked to summarise public comment received from stakeholders in the Mersey River catchment. The diversity of opinions and strength of feelings expressed in those submissions became the inspiration that was to see me through a long subsequent involvement in a study on the environmental condition of waterways in the Mersey catchment.

I became involved in public consultation, project managed experimental studies on the river, was a member of the interdepartmental working group that oversaw the process, and was responsible for putting together the final report of that group. I watched sometimes with amusement and commonly with frustration as science and politics grappled with each other, and as the rickety train of co-operation between government, business and the community trundled along its track, threatening on more than one occasion to fall right off the rails! The release of the working group’s report and recommendations was a great milestone for the project, but of course was just the end of the beginning. Implementing the recommendations and facilitating local action are the new challenges.

So when I asked myself what I have to offer to a Stream Management Conference, my answer was that as a scientist, I have little to offer that cannot be better dealt with by other, more experienced professionals. But as the witness to a process, I have experiences and insights that I can share, which may help others in designing consultation processes for stream management...or at least give them strength when things go wrong! So if

that is the kind of information you are looking for, read on.

I have organised this paper into a number of sections: The first section tells the story of the Mersey River and why it needed to be studied in the first place. This story is to a large degree drawn from the results of the Mersey River Experimental Study, carried out in 1996/7 (MRSC 1997). The second section is a Cook’s tour of the process that was followed to investigate the problems in the Mersey’s waterways. The third section is an analysis of what worked and what didn’t work. In that section, I discuss what I think are the real fundamentals to a good stream management process, and how I think they can best be nurtured.

2. ELEMENTS OF THE PICTURE

The Mersey River is in the central north of Tasmania, with its mouth at Devonport, home of the Spirit of Tasmania ferry. The highland catchment of the Mersey River was diverted into the Forth catchment by the Hydro-Electric Corporation in 1973, for the purposes of power generation. At the time, no allowance was made for environmental flows in the Mersey River downstream of the diversion dam (called Parangana Dam). Instead, almost all of the water of the upper Mersey River was, and continues to be, used to generate power at four power stations on the Forth River, contributing to a scheme that meets about 16 percent of Tasmania’s energy needs (Anderson 1998). The Mersey River was left with a mean and median flow that was ten times less than natural flows, measured immediately downstream of Parangana Dam (Smythe 1997).

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Pressure for improved summer flow in the Mersey River began to mount in the 1990s. By that time, significant agricultural development had occurred in the catchment. Construction of a number of small farm dams in the upper Mersey catchment, and an increasing consumptive use of water from the Mersey River and its tributaries, were associated with this development. By 1997, there were 137 licences to take water for irrigation or commercial use from the Mersey catchment (Leary and Huzzey, 1997).

Much of the pressure for better river flows came from recreational fishermen who were keen to ensure that they could continue to catch a good trout in the Mersey River, which is in the top two or three most popular rivers in Tasmania in terms of the number of anglers participating and the total number of days spent on the river by all participants (Sanger 1997).

Water quality in the rivers and streams of the Mersey catchment was also being highlighted as an issue by local people. Increasing algal growth in some tributaries and in the Mersey River itself was a particularly visible sign of nutrient pollution. Bacterial contamination was a less visible but significant water quality problem, affecting tributaries to a greater extent than the Mersey River itself. It was not clear whether this contamination was due to local effects, such as stock access to waterways, or contamination from sewage treatment plants and dairies, or a combination of these.

These problems were being reflected in the health of the river biota; macroinvertebrates sensitive to water quality were absent from a number of tributaries, and there was a reduced number of taxa near the diversion on the Mersey River as a consequence of the reduced flow and habitat alteration caused by Parangana Dam (Oldmeadow 1997).

Although this was the story that was unfolding for the Mersey catchment, no overview of these pieces of the picture had been put together by the mid-1990s. Further, despite some heroic local efforts to improve the condition of the waterways, there had been no co-ordinated effort to manage the catchment in a more sustainable manner. Consequently, and in response to significant disquiet from locals about the condition of their river, the Mersey River Working Group was formed in January 1996.

3. THE MERSEY RIVER WORKING GROUP AND ITS PROCESS

The Mersey River Working Group followed a process which, when seen in its skeletal form, was I think a very sound one. As a good starting point, the Group itself was made up of individuals representing bodies that had the power to do something about the problems in the Mersey River: the Hydro-Electric Corporation, the Inland Fisheries Commission, and the Departments of Primary Industry and Fisheries, and Environmental and Land Management.

Naturally enough, representatives from these bodies each brought a different set of values and opinions to the group. Resolving these differences was arguably the greatest challenge for the group, as I will discuss further in Section 4. However, fortunately, the group recognised that it needed to define its aims clearly, and that it needed to gain a proper understanding from local people on what they saw as the major issues for the Mersey catchment.

3.1 Public Submissions

So the first major action of the Working Group was to carry out a process of public consultation. In May of 1996, the Working Group asked people to make submissions setting out their “concerns relating to flows in the Mersey River and its tributaries, and any perceived related catchment issues”. It also asked them to “include suggestions with practical solutions, both in the short term and to ensure the maintenance of satisfactory flows in the future”. This call for submissions was made by writing directly to 15 identified stakeholders in the Mersey catchment, and by placing a public notice in the local newspaper.

Twenty-four submissions were received. Respondents were clear in their concern for the health of the Mersey River and its catchment, but were also mostly constructive in their suggestions for improving the condition of the catchment. Despite the request for comment calling for practical solutions relating to flows alone, respondents considered that a range of catchment activities was necessary to address the problems; seven respondents specifically mentioned the need for a total catchment management approach. Naturally, the need for improved flow and to allow minimum environmental flows were also significant issues raised in responses. Twelve respondents called for increased flow in the Mersey River, and 14 recommended that the HEC maintain the river flow above a set minimum level in order to achieve this.

These submissions confirmed to the Working Group that it needed to concern itself with the broader issue of catchment management, rather than just focusing on flow releases from Parangana Dam.

3.2 Scientific Studies

The second step in the Working Group’s process was to scientifically investigate the environmental issues in the Mersey catchment. These investigations were carried out over the summer of 1996/7, and were managed by a sub-committee of the Mersey River Working Group. The study sought information on the issues that were concerning local people (as identified by public submissions), including invertebrates, water quality, fish, general river condition and flows. In addition, the Hydro funded a study to help determine appropriate environmental flows. This study was based on the Instream Flow Incremental Methodology, and predicted the amount of stream habitat that a particular species will utilise at given flows (see Davies et al. 1997).

Again the Working Group understood the need to keep the community involved in its process. The sub-committee (called the Mersey River Study Committee) held a public meeting in December 1996 to seek feedback on the proposal for scientific studies (labelled the Mersey River Experimental Study) and to obtain commitments from local people to be involved in some components of the field work. The meeting was enthusiastically attended by around 50 people and 16 offered their time to help with the studies.

Almost all of the local people who put their names down went on to be involved in gathering information on the condition of the river. They were trained in the assessment technique and “supervised” in its execution. (In fact the supervision amounted to a couple of scientists wandering forlornly around a rather large catchment, searching rather unsuccessfully for people with clipboards!)

The results of all this work became available to the Working Group in July 1997, after some frenetic and committed effort by the boffins. It then came time for the Working Group to begin to develop its recommendations.

3.3 Recommendation Development

The Working Group’s recommendations were developed in the context of the findings of the experimental study, community values as expressed through public submissions, and what group members, as representatives of agencies, thought they should be trying to achieve. In terms of process, the most significant step that the group took was to engage the services of a professional facilitator to help it workshop the recommendations. I think this was a vital step in the process, and I discuss the role of facilitation in more detail in the next section.

The recommendations were endorsed by the relevant agencies and ultimately released to the public, by the Ministers for each agency and with fanfare, on the banks of the Mersey River on 8 May 1998. The launch happened some ten months after the findings of the experimental study were released to the Working Group, and more than two years after the Working Group had been formed. It had been a long road.

The recommendations were wide-ranging, and addressed environmental flows, catchment management issues and the need for ongoing community consultation. No priority was placed on the recommendations; instead it was stressed that all should be implemented in order to meet the social, environmental and legislative requirements relating to the Mersey catchment.

Recommended actions included support to integrated catchment management and environmental value setting processes, appropriately directed monitoring programs, flow releases following establishment of baseline information, and water management planning in tributaries.

These recommendations all represented significant commitments from agencies. For example, maintaining a year-round flow of 2.0 cumecs in the middle Mersey River will cost the Hydro of the order of \$700,000 per year in lost revenue alone (Krohn and Anderson, 1997). Although not clearly quantified, socio-economic and environmental benefits from such a release were predicted to be significant (van Putten and Bell, 1997). Nevertheless, the Working Group understood the need to ensure that the cost of flow releases could be justified in the long-term, and placed pre- and post-release monitoring at the core of its flow release recommendations to help determine the actual environmental benefits of releases.

4. ELEMENTS OF GENUINE CONSULTATION AND CO-OPERATION

Of course, this relatively simple three stage process of public consultation, scientific studies and recommendation development, did not unfold all that smoothly. Inevitably, complexity and chaos entered the game in managing group dynamics, handling public input, and resolving the politics behind study aims and recommendation development. I learnt a great deal about what causes and what minimises chaos. In this section, I discuss some of the ways in which I think complexity and chaos can be managed to prevent the process from falling over.

4.1 Group Dynamics

The Mersey River Working Group started life as just a collection of individuals, each pursuing their own sectarian interest. It took a long time for the group to really start pulling in the same (or at least a similar) direction, and it was then that the group was best able to pursue its aims. I have outlined below some of the things that I think are important to creating an atmosphere of trust and co-operation within a group.

- Realistically and clearly define the role of each group member. These roles should reflect what each member is capable of achieving and is committed to, not what they would *like* to do, or what others *want* them to do. Ideally, make sure everyone is being asked to contribute something meaningful, and is being rewarded for their contribution.
- Have some meals together. Eating is a great pastime anyway, and eating with other group members is a personal bonding experience that can help you all to respect each other even if you don’t agree on every issue. It also gives you all time to talk in a more informal way about some of the obstacles the group might be facing, and the reasons behind them.
- Look for a group chairperson who is a good listener and who is able to act impartially. To allow the latter to happen, ensure that the chairperson does not also have the role of representing a particular agency or interest group. It is worth choosing this important person carefully. She or he is in the best position to play a facilitation role in the group.

- Ensure that there is group consensus as to its aims and scope at the outset, and that these aims remain relevant. When defining the aims of the group, give each person the opportunity to have input, and honour the contributions of each group member. This is a time when someone with good facilitation skills can be of great assistance - a good facilitator has lots of groovy techniques for getting everyone to participate and take ownership of the group's aims.
- Encourage group members to think about their own role not just in the process, but in the group itself. For example, encourage members to explore the ideas and intention of others ("what do you think?" rather than "I think") and to be honest to themselves about what their intentions really are ("am I willing to be influenced?") (see Senge et al. 1994, for ground rules of discussion). It is okay and in fact sensible to do this overtly. In my experience, people respond positively when they know what is expected of them.
- Don't try to get answers too soon. I discuss the four stages of problem solving in Section 4.2.2 in relation to public consultation, and they apply equally well here. Skipping stages will cost, not save time. It will tend to create illusory agreements that are later challenged by group members, and will result in indefensible decisions that are based on a tenuous foundation.

I'm sure there are many more elements to good group dynamics. In my experience, any time spent exploring group dynamics is time well spent.

4.2 Harnessing Public Support

There was significant public anger and frustration about the state of the Mersey River in the build up to establishing the Mersey River Working Group; in fact, it was public pressure that catalysed the formation of the group. I gather this is a common scenario in stream management. Like all catalysts, public anger does not just change as a result of the reaction it causes! Angry people want simple answers and do not tend to be particularly interested in long-term, strategic solutions. This is obviously at odds with a good stream management approach, so one of the most important functions of a stream management group is to get local people on side.

There is no "right answer" for how to do this. However, I discuss below three elements of harnessing public support that I think are important. Naturally, these elements draw strongly on my experiences in the Mersey study.

4.2.1 Be Clear About Your Aims and Process

The aims of a stream management study that are communicated to the public will help shape their perceptions of your project and will impact, either positively or negatively, on their input. The Mersey River Working Group chose to undertake public

consultation to help define its aims. It was therefore important that the group asked broad questions (for example, questions were asked about catchment issues as well as flow, and about tributaries as well as the Mersey River itself) in order to get a comprehensive response from people. People were also asked to focus not just on what the problems were and what might be causing them, but also on what some of the solutions might be. As well as providing valuable information to the Working Group, this was the first step to getting the community on side.

Communicating the process is equally important. Doing studies and getting an answer from agencies can take a long time. People who are not directly involved in the process may have trouble understanding why on earth progress is so slow, and may get frustrated and give up on your process. The Working Group nearly fell foul of this one. Its recommendations were released more than six months later than we had anticipated. In expectation of the results, a catchment management group had formed. This group had to put its activities on hold to wait for our direction-setting, and I think lost a little of its momentum. The impact of this could have been minimised by better communication of the project timing.

4.2.2 Take Them With You

Take the community with you as you think through the stream management problem. Generally there are four stages to generating appropriate solutions to a problem (known as the ORID): objective, where we simply gather the facts; reflective, where we respond to those facts at an emotional level; interpretive, where we attach values, meaning and purpose to the issue and generate options; and decisional, where we actually react or make resolutions for action. It will be impossible to inspire local enthusiasm at the decisional stage if people have not been involved at the earlier stages. Therefore, if you want local action to develop out of government-based initiatives for the waterway, you will need to involve local people in thinking out the problem with you, through each of its stages.

Opportunity for public submissions, physical involvement in work on the river and public meetings are all ways of getting local people involved in the objective, reflective and interpretive stages of problem solving. To be effective, these opportunities for input should be positive in their intent, and should value and honour individual contributions and efforts. It may be useful to make use of someone with facilitation skills to assist in planning this consultation, and to help design and run public meetings.

4.2.3 Find Yourselves a Stalwart

We were very lucky with the Mersey study in that we had the support of a strong, inspirational community leader who was interested in working with us to get a good outcome for the river, and who understood the need for compromise between competing interests. He had been fighting for the river for 25 years and was not

about to give up when the politics got tough! His leadership in seeking better environmental quality in the river was by example; he had an instrumental role in rehabilitating a willow infested area of the Mersey River near its mouth. We involved this person in the Mersey River Study Committee, and he also had some input into the Working Group's process of developing its recommendations.

Not every catchment will have someone as committed and easy to work with as this fellow was. But it is worth tracking down a community member who has at least some of his traits. The role he played in our group was a critical one: he kept us in touch with the issues that were important to the local community, was a channel for us to get information back to people in the catchment, and was a well-informed contact for the media when they were seeking local reaction. Ideally, your stalwart should be someone who is:

- active on the ground (not just active at apportioning blame to others);
- respected by the community;
- able to represent more than just a single interest group;
- able to grasp the complexity of the stream management problems;
- patient and positive;
- articulate;
- trustworthy (particularly if this person will be privy to politically sensitive agency group discussions); and
- able to mobilise local support and help organise local events.

4.3 Reaching Consensus

Resolving departmental politics and actually getting agreement to specific recommendations was, for us, the most challenging part of the process...the science was the easy bit!!

Bluntly, reaching consensus was about putting all the agencies in the cross-hairs; it was time to stop apportioning blame, and to start accepting shared responsibility for action. We sought the services of a professional facilitator to help us develop our recommendations, and he paid for himself a hundred times over. His distance from our process and group politics enabled him to challenge us all in a most productive way.

Of course this facilitated workshop was only useful because each agency representative came to it with a clear idea of what commitments they could make - they knew the scope of their delegated authority. This meant that there was room for genuine bargaining towards outcomes, and allowed a defensible sketch of recommendations to be developed. These recommendations withstood their first test - all were later formally endorsed by the relevant agency. They are currently being put to the second, more significant test of actually being carried out.

5. CONCLUSIONS

I went into the Mersey River study thinking that our work would be all about the environment. I came out realising that the real issues were about *people*. A successful stream management process is one that nurtures a happy, co-operative management team, and involves the local community in the problem solving process. Attention to the consultative and co-operative elements of the process will make a positive environmental outcome more likely.

In the Mersey River study, communication moved people's thinking from the simple "solution" of turning on the tap at Parangana Dam to the more complex but strategic solution of better catchment management. I believe that it is this shift of thinking and focus that will really make the difference to the environment of the Mersey River in the long-term.

6. REFERENCES

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