Public outrage and public trust

A road map for public involvement in waste management decision-making

by Les Robinson
Keynote address to Waste and Recycle 2002 Conference, Perth WA, Oct 2002

Introduction

Western Australia is not alone in having a history of often bitter conflicts over the siting of waste management facilities. This is a global trend in developed countries where publics are increasingly intolerant of remote and apparently unaccountable decisions made by government agencies.

How then do we navigate this difficult ground - simultaneously educating the community, building credibility, retaining trust and avoiding outrage?

This talk draws on the experience of agencies in the UK, Canada and the USA to make it clear that community participation in decision-making delivers legitimacy, better risk management, and improved technical competence in technology and site assessment processes.

1) WA's waste communication challenge

Western Australian local governments and agencies are now facing complex questions about the design of future waste management systems. In particular:

The IRR design question

What is the optimum design of an integrated resource recovery system for any particular region? That is, what is the preferred mix of waste prevention initiatives, recycling and green waste systems, educational programs, and secondary resource recovery capabilities to match the social, environmental and economic needs and constraints of a given region?

The SRR selection question

Within a regional IRR strategy, what is the appropriate SRR technology or mix of technologies and where should it or they be sited?

It's important to note that SRR technologies are costly industrial facilities, often novel in design and with a wide range of potential impacts. They may involve significant financial and/or contractual risks for local government. They can have significant heavy vehicle traffic impacts. They may involve difficult-to-dispose residues. They may require significant changes to established recycling and green waste systems. They may also require original regulatory and monitoring frameworks.

Decisions about such facilities are therefore amongst the most complex and potentially contentious that local government can undertake.

Western Australia is not alone in having a history of often bitter conflict over the siting of waste management facilities. This is a global trend in developed countries where publics are increasingly alerted to environmental risks and intolerant of remote and apparently unaccountable decisions which affect their interests.

As a result of these conflicts, the traditional 'DAD' strategy (Decide, Announce, Defend) has gradually been replaced by a range of responsive and trust-building community participation processes. This has been fundamentally recognised by the WA Government which has recently affirmed its commitment to increasing participation in all aspects of government policy. [1]

2) Key concepts

A) Public outrage

All waste facilities involve a degree of environmental risk, and public concern about the inequitable distribution of risk is a major factor in siting conflicts. This concern is magnified by perceptions of unfairness and exclusion in the decision-making processes. (Kuhn and Ballard 1998, Hunold and Young 1998). Where novel technologies are proposed, public concerns are further heightened (Kasperson et al 1988).

Risk communicators have identified a number of factors which influence how individuals perceive risk, including (Rowan 1996):

1) risks that are judged to be ***controllable*** by individuals are deemed less risky than those which are uncontrollable;

2) risks that are ***familiar*** to the individual and well known to science seem less risky that those which are unfamiliar and unknown;

3) risks that are ***voluntarily*** *accepted* appear less risky that involuntary exposures;

4) risks with a direct ***benefit*** to affected individuals are deemed less risky that those which lack a clear and direct benefit; and

5) risks which are ***evenly distributed*** across society are perceived as less risky than those which inequitably burden certain individuals or communities.

The typical response of communities to apparently uncontrolled, unfamiliar, involuntary, non-beneficial, or unfair risks is *outrage*.

There is a highly political dimension to outrage: as Rowan points out, these perceptions are expressions of various types of power: informational, decisional, and distributional. When people feel deprived of facts, unable to control their

---

[1] Department of Premier and Cabinet, Citizens and Civics Unit, 2002

lives, and forced to bear the costs but not the benefits of change, outrage is a natural response.

Risk communicators have long agreed that power-sharing is an inherent aspect of effective risk communication.

B) The ladder of public participation

Community engagement covers a spectrum of possible approaches, with associated capabilities. It is often presented as a 'ladder'. We blended two existing ladders (Arnstein 1969, IAPP 2000) to create one suited to the waste management scene.

EMPOWER ↑ PARTNER ↑ INVOLVE ↑ CONSULT ↑ INFORM ↑ INFLUENCE	↑ Increased capacity for information processing and learning	↑ Increased capacity to elicit values	↑ Increased capacity for problem solving	↑ Increased capacity for resolving conflict

Table 1: Community engagement ladder

Note that, in practice, most public involvement programs consist of an *integrated mix* of approaches. For instance, the waste strategy campaigns in UK counties such as Hampshire and Cheshire involved distribution of information materials to the community ('Inform'), consultative surveys with the broad community ('Consult') and community workshops ('Involve').

C) Public Participation Matrix

A useful way of illustrating the different engagement methods is to compare the *inherent risk* in the situation with the *complexity of information* which needs to be understood by the participants for informed decision-making to occur. This allows us to map some of the wide variety of engagement processes which are currently in use. See Figure 1.
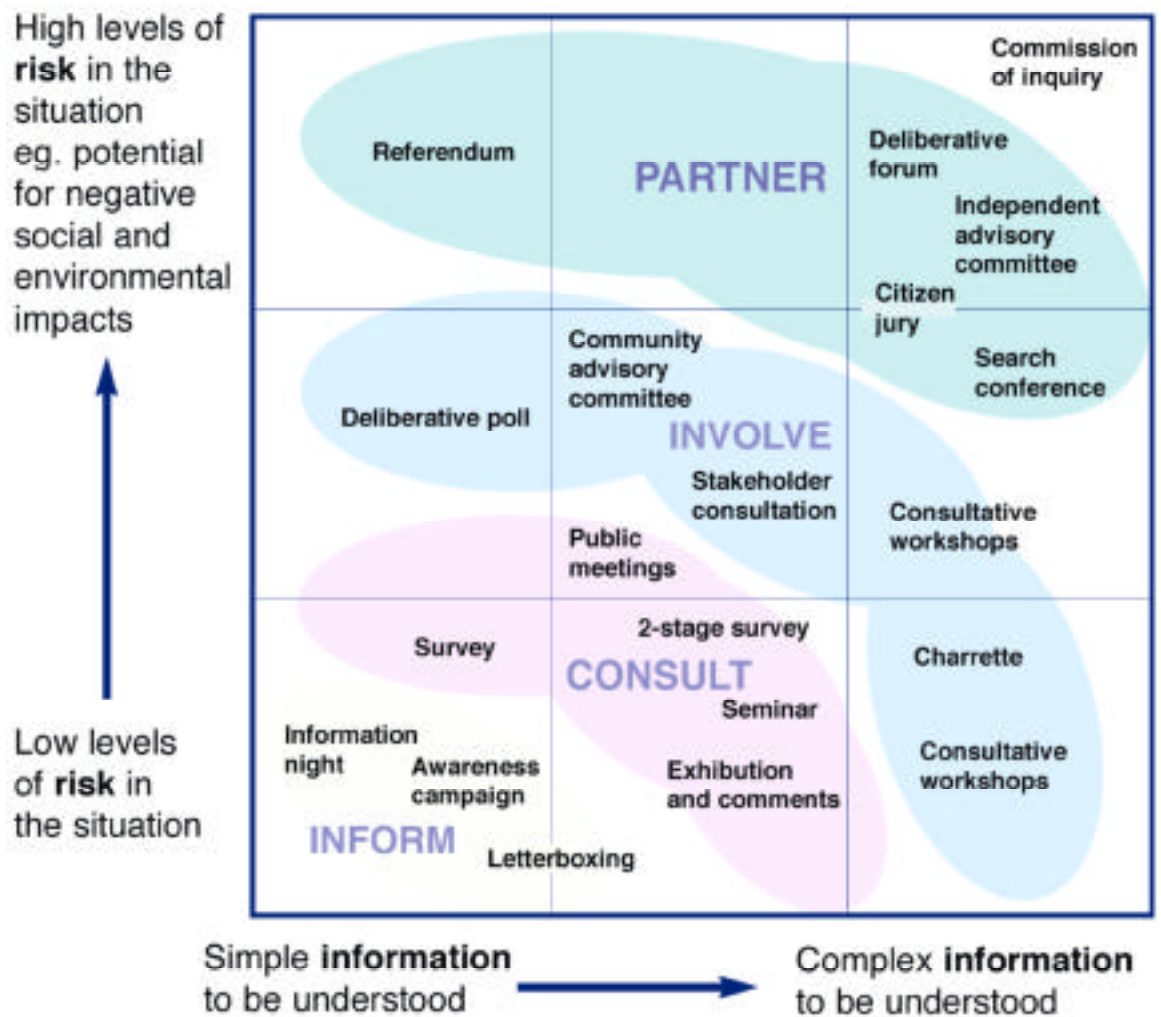
Figure 1: Community Involvement Matrix. © Les Robinson 2002

3) Conclusions from a review of international best practice

There is an extensive peer-reviewed literature which evaluates community education and involvement in the siting and choice of technologies for new waste facilities. This literature focuses particularly on the experiences of government agencies in Canada, the United States and the United Kingdom over the past decade.

After reviewing these studies, and considering the situation in Western Australia, we offer the following conclusions:

a) 'Marketing' change may be a high risk activity

There is strong support for the proposition that agencies which rely on marketing or public relations approaches to shape public attitudes to new technologies run the risk of losing their reputation as *honest brokers* between technology proponents and the public good.

The experience in many siting processes shows that once public trust in the agency is lost, social conflict tends to become intractable, and the siting process may face intense, protracted community opposition. This frequently led to the failure of siting processes after considerable expenditure of time and public money.

b) Educational or information-centred approaches alone may be inadequate

'Educational' approaches which rely on assumptions about the ignorance of the public and the primacy of managerial knowledge tend to be ill-suited to technology choice and siting processes because:

• simple information does generally not exist which can satisfy basic public questions such as 'What will the impact be?', 'Is it safe'?

• the public have valuable kinds of knowledge which needs to be legitimised and injected into the deliberations on technology choice and siting;

• the public tend to be distrustful of scientific and managerial data, which they know is subject to distortion and manipulation;

• the credibility of agencies is just as important as their expertise, and the one-way communication of simplistic, unsatisfactory information tends to damage agency credibility when there is public conflict over the facts;

• communicating *information* is not ultimately as important as communicating *trust*, and successful environmental management processes always involve a degree of shared decision-making with the public.

c) Participative approaches work better

During the 1990's the weaknesses in traditional consultative techniques however came to be widely recognised as authorities throughout the developed world faced intense, costly and frequently successful public campaigns, particularly against native forest logging, waste facility siting and the nuclear industry.

This led to an increased interest in extending public consultation from relatively passive consultative processes, towards 'deliberative' processes which involved the public and stakeholders in two-way discussions and involvement in the decision-making process from an early stage.

There is a strong interest in participatory processes in Australia. Black et al 1999 lists no fewer than 31 different participatory action research methodologies in the agricultural sector alone. Stakeholder forums are widely used in catchment management, forest management and other contentious environmental issues. As issues become more complex, and the potential for conflict increases, governments appear to be turning more and more to participatory approaches.

There is unequivocal evidence from many jurisdictions that well run participatory techniques can be effective in introducing public values into decision-making processes, in reducing conflict between stakeholders, in building trust in government agencies, and in producing more satisfactory and less adversarial outcomes.

d) What makes a successful technology choice and siting process?

Successful technology choice and siting processes have tended to include the following features:

1) Communications included a mix of educational, consultative and participative approaches in an *integrated program* that provided opportunities for the whole of the affected community.

2) There were forums for two-way discussions between representative members of the affected public, community activists, the proponents and technical experts, preferably with a degree of shared decision-making (e.g. consensus-based stakeholder forums).

3) The process responded to the public's requests for new information, including the conduct of additional research.

4) The forums were independently chaired, were responsive to the needs of participants, involved a degree of shared control over the agenda, and built good interpersonal relationships.

5) There was a generous allocation of time for the community engagement process (one Canadian agency manager mentioned an '18 month rule': *'there seems to be an 18 month rule having to do with building the level of support in a community. It seems to be just the amount of time that it takes for a community to become involved and make decisions'. - Quoted in Kuhn and Ballard 1998)*

6) There was early public involvement, well before a final decision was to be made.

7) The agency was not the proponent of a particular technology or site, or if the agency was the proponent, then the process was seen to be independent of the agency.

8) The agency was genuinely committed to community participation.

4) Why are 'influence' techniques so often inappropriate in environmental management?

There is a concern amongst decision-makers that the public are not well equipped to understand the reasons for a shift to SRR technologies, nor to comprehend the consequences of the different technologies available. There is a fear that public ignorance may lead to unreasoned conflict, and that better understanding is essential.

Therefore authorities have expressed an interest in *community education, public relations* and *social marketing* approaches to fulfilling this educational need.

• *Community education* seeks to answer the public's need for <u>information</u>.

• *Public relations* seeks to influence the public's <u>attitudes</u> towards a brand or product.

• *Social marketing* seeks to promote socially beneficial <u>behaviours</u>.

The literature suggests a number of reasons to be wary of these *one-way* communication approaches.

1) The public's concerns are not the same as waste managers

Waste managers tend to be concerned with efficient and sustainable systems. However the public is primarily concerned with potential health and amenity risks and the alternatives, with potential unfairness in the distribution of costs and benefits of the new technology, and with the immediate day-to-day convenience of systems.

Further, waste managers talk in a highly codified, jargon-laden, assumption-rich language which reflects their own professional and technical expertise. This language may require considerable interpretation before it can be meaningful to lay people.

These issues suggest that the kind of information which managers think is important may not the kind the public is liable to find relevant and meaningful.

2) Managers may lack appropriate information

The process of establishing a new waste system is replete with uncertainties and unknowns. Even if and when the technical data can be agreed, managers are unlikely to be able to answer the public's most salient questions, like 'What is the risk?', 'What is the impact on my life and lifestyle?', 'How could this affect my family's health?'

It is possible that the information may simply not exist which can form the basis of a meaningful education campaign. It is also possible that purely information-based campaigns may raise concerns which managers have no way of answering.

Educational programs, based on simplified, incomplete and unsatisfying information, may therefore work to damage the credibility of authorities, leading to potentially unsolvable conflicts.

There is therefore a need for interactive processes which create and shape new information that responds sensitively to public concerns.

3) An agency's credibility is as important as it's expertise

The choices required for a new waste system are unlikely to be simple matters of balancing logic or data. They require *judgements* on incomplete information, informed by local *values* and concerns: hence they are inherently moral endeavours, which are as much about policy as facts.

Significantly, there is strong evidence that the *credibility* or *trustworthiness* of authorities is central to the resolution of public concerns over waste management facilities. (Kasperson 1986; Fewer 1999; Siegrist and Cvetkovich 2000; Siegrist, Cvetkovic and Roth 2000; Siegrist 2000; Sandman et al 1993; Petts 1994; McComas 2001).

The credibility of authorities is based on a perception that those authorities share desired *values* such as **honesty, openness, lack of bias, fairness** and **overriding concern for the community's well-being.** (McComas and Trumbo 2001)

The effect is that new technologies introduced by trustworthy institutions are perceived to be less risky and more beneficial than those introduced by untrustworthy institutions. This effect is strongly supported by empirical research.

Honesty is essential in building trust in relationships, hence hidden agendas or vested interests may damage credibility. Attempts to deceive or manipulate the public also destroy credibility.

These conclusions suggest that the use of public relations 'spin' to manipulate public attitudes or gloss over the potential risks of proposed waste facilities runs the risk of damaging the institution's credibility and exacerbating public conflict.

4) The public have their own legitimate forms of knowledge

Far from being 'ignorant', the public are likely to be rich in relevant knowledge, experiences and values which managers need to make sound decisions. Several studies have gone further, questioning the utility of value-free technical knowledge, and point to the fact that many conflicts are between different kinds of knowledge.

A number of researchers also point out that one-way communication processes which do not legitimise and explore the public's store of knowledge may reduce the *competency* of decision-making by denying managers valuable forms of information.

5) Conclusion: four compelling reasons for participative approaches

On the basis of the literature review, there appear to be at least four compelling reasons for waste management authorities to involve their publics in more *participative* kinds of decision-making.

These are state policy, government legitimacy, managerial competence and risk management.

1) State policy

In Western Australia, increased community involvement in decision-making is strongly promoted at State Government level. The incoming government has established a Citizenship and Civics Unit in the Premiers Department to drive this change. The Premier recently launched *Consulting Citizens: A Resource Guide* [2] which reiterates many of the principles discussed below. This move accords with emerging practices in government throughout the developed world.

2) Legitimacy of government

There is strong support for the contention that the *credibility* of government agencies is the single most important factor in the successful communication and resolution of technology siting issues. This credibility of agencies is closely linked to perceptions of fairness, lack of bias and consistent pursuit of public interest in the decision-making process.

It follows that an organisation should not be both a proponent and a trusted player in a technology siting issue. Where a government body is a proponent, care should be taken to ensure to that the decision-making process itself is independent of that body.

The literature supports the contention that the *perceived* legitimacy, credibility and neutrality of government are best assured by direct involvement of members of public in *shaping* and *deliberating* in decision-making processes that affect their interests.

> *'Credibility must be grounded in sharing power with the public. Nothing undermines it more quickly than a manipulative approach.' (Rowan 1996)*

3) Technical competence

A number of studies have suggested that deliberative decision-making processes result in better technical decisions.

---

[2] The guide can be downloaded from http://www.ccu.dpc.wa.gov.au

> *'The public are not information-poor: they can capitalise upon a range of cultural and experiential resources. ' (Petts 1997, p378)*

> *'A decision arrived at through inclusive communicative democratic procedures is likely to produce the wisest decision, in that it grasps the consequences and has considered alternatives.' (Hunold and Young 1998, p87)*

> *'Participation and deliberation are not only a matter of political expediency but also promote analytical robustness.' (Petts 2000, p830)*

Importantly, the studies do not support the frequently expressed fears of managers that the public are not competent to comprehend complex data or balance risks:

> *'Contrary to expert fears, it is evident that when scientific uncertainty or lack of expertise is openly acknowledged, and when management mechanisms to deal with the situation are explained, demands for zero-risk options are not forthcoming from the majority, and experts are not rebuked. Members of the public who have an opportunity to address issues in an informed manner are willing and able to balance risk and benefits.' (Petts 1997, p 378)*

4) Risk management

There is evidence that public participation provides a degree of assurance against two significant risks faced by waste managers: political risks and environmental risks.

Public *outrage* is the result of technology and siting decisions which are perceived to be uncontrolled, unfamiliar, involuntary, non-beneficial, or unfairly distributed (Rowan 1996).

Once public outrage commences it can be difficult to contain, with the media playing spoiling role, enhancing and sustaining the perceptions of conflict and unfairness.

The risk communication literature consistently asserts the importance of participatory processes in minimising conflict.

> *'For the most part, siting processes do not fail because of inadequate environmental or technical considerations, but because of the adversarial decision-making strategies employed by the proponents'. (Kuhn and Ballard 1998)*

APPENDIX 1

Principles for Pro-active Public Participation

Prepared by Nolan-ITU for the Waste Education Strategy Integration Group (WA) 2002

Principle 1: The public (which includes local residents, general community, Government officials, industry, non-Government organisations, and others who have a stake) has a right to be involved in IRR decision-making.

Principle 2: IRR decision-making will be conducted in an inclusive, honest, and transparent manner that can demonstrate independence from proponent interests and foster trust amongst all participants. Agencies will provide feedback to the public on the way its input has been used in IRR decision-making.

Principle 3: Using the Public Participation Matrix (PPM), agencies will assess IRR risk and complexity (social, technical, financial and environmental aspects) and design appropriate public participation approaches.

Principle 4: Agencies will ensure that all stages of IRR (IRR planning, Resource Recovery option selection, Resource Recovery development, and IRR implementation) will feature public participation opportunities. Those opportunities will typically feature a mix of educational, consultative and deliberative methods and will be based on appropriate social research.

Principle 5: Agencies recognise that special skills and appropriate human and other resources are needed to effectively conduct IRR public participation programs.

Principle 6: Agencies will continuously improve IRR public participation programs in line with community expectations.

Principle 7: Agencies will demonstrate commitment to these principles and cooperatively fulfill the roles and responsibilities outlined.

Les Robinson - Communication and social change
28 Cooinda Place, Kiama 2533 Phone (02) 4233 1974, 0414 674 676
Email: les@socialchange.net.au

APPENDIX 2

Two decision tools [3]

Deciding an appropriate level of public participation depends on the context and appears to be as much an art as a science. Advice from experienced practitioners should always be sought when designing a community involvement process. However as a guide, the following tools may be useful.

1) The Public Participation Matrix [4]

The choice of a community involvement process depends on your assessment of two factors:

- the *risk* inherent in the situation e.g. the potential for negative environmental or social impact, or the risk of community conflict.

- the *complexity* of information which needs to be digested before informed participation is possible.
  Here are some questions to help you evaluate these factors.

Inherent risk

1) How do you rate the potential for conflict with the community over this decision?

☐ Low　　☐ Medium　　☐ High

2) How do you rate the potential for social, environmental, or financial damage if the wrong decision is made?

☐ Low　　☐ Medium　　☐ High

3) How many unknowns are there in the current decision-making equation?

☐ None　　☐ A few　　☐ Many

---

[3] These tools were developed in the course of a joint project between Les Robinson and Nolan-ITU for the Western Australian Local Government Association: *A Pro-Active Public Participation Policy for Waste Recovery in Western Australia*, 2002.

[4] The assessment questionnaire is inspired by a similar tool used by the International Association for Public Participation.

Complexity of information

4) How much information needs to be communicated to the community for them to participate?

☐ A few simple facts	☐ A detailed proposal	☐ A significant amount of technical data

5) How much learning is required by the participants before they can be expected to make an informed decision?

☐ Low	☐ Medium	☐ High

6) How many abstract or technical concepts need to digested before an informed decision can be made?

|		
☐ None	☐ A few	☐ Many

Interpretation

IF most of your answers are in the left hand boxes, then CONSULT methods may be sufficient.

IF your answers are scattered between the left, centre and right hand boxes, then INVOLVE methods may be sufficient.

IF the most of your answers are in the right-hand boxes, then you should consider using PARTNER techniques to minimise your risk and maximise the amount of knowledge and perspectives brought into the decision-making process.

The matrix below is a guide to particular community involvement methods which may be suited to the risk and complexity of your situation.
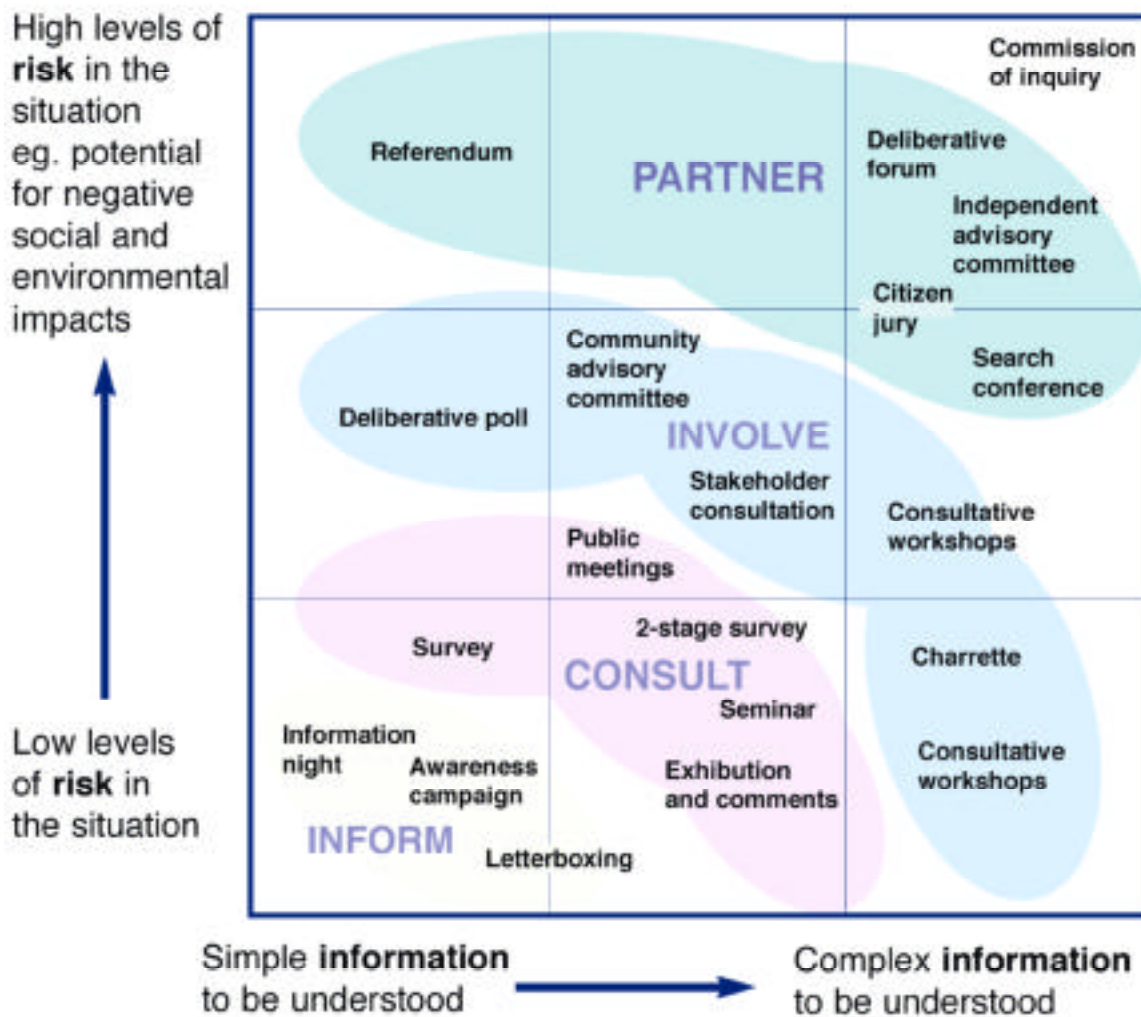
Figure 1: The Public Participation Matrix   © Les Robinson 2002

2) Vroom-Yetton Decision Tree [5]

In 1973 Victor Vroom and Phillip Yetton introduced a contingency decision-making model for the business world. The model was intended to aid in deciding on the level of participation by subordinates would improve the quality of decision making in a corporate setting. The utility of the model was verified in a number of empirical studies.

The model was subsequently modified slightly to allow for public participation in general and in natural resource decision-making in specific, and has been tested in a number of independent studies (Lawrence and Deagen 2001).

We have altered the model slightly to improve clarity and suit the Australian context.

KEY

A: The manager solves the problem or makes the decision alone without public involvement (=INFORM).

B: The manager seeks information from segments of the public, but decides alone in a manner which may or may not reflect public influence. (=CONSULT)

C: The manager shares the problem with separate segments of the public or stakeholders, getting ideas and suggestions, then makes a decision which reflects public influence. (=INVOLVE, with separated stakeholder segments)

D: The manager shares the problem with the public and stakeholders as an assembled group, getting ideas and suggestions, then makes a decision which reflects public influence. (=INVOLVE, with mixed participants)

E: The manager shares the problem with the public an stakeholders as an assembled group, and together the manager and the group attempt to reach agreement on a solution. (=PARTNER)

---

[5] Adapted slightly from Lawrence, R.L, and D.A Deagen. 2001, Choosing Public Participation Methods for Natural Resources: A Context-Specific Guide. *Society and Natural Resources*, 14:857-872.

1) Does the manager have sufficient information to make a high quality decision?

2) Is the problem structured such that there is space for alternative solutions?

3) Is public acceptance of the decision critical to effective implementation?

4) If public acceptance is necessary, is it reasonably assured if the manager decides alone?

5) Are the public and stakeholders willing to engage in a dialogue in order to improve the situation?

6) Would the quality of public input (or future relations) be improved if learning occurs among the public and stakeholders about the issues?
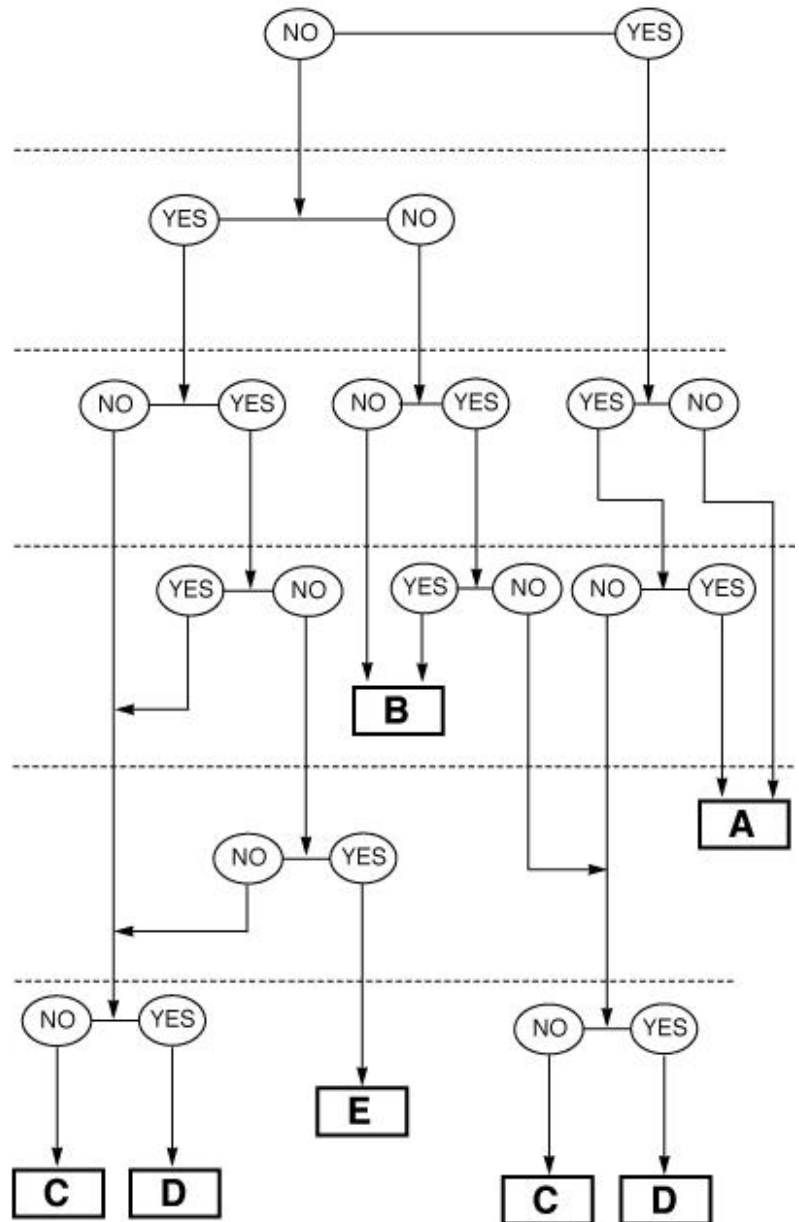
Figure 2: Vroom-Yetton decision tree for selecting public participation methods for government decision making.

References

Arnstein, S.R. 1969. A ladder of citizen participation. Journal of the American Institute of Planners 35(4): 216–224.

Black,A.,Duff,J.,Saggers,S.,Baines,P.,Jennings,A.,and Bowen,P.(1999) Rural Communities and Rural Social Issues: Priorities for Research Rural Industries Research and Development Corporation

Frewer, L. 1999. Risk Perception, social trust, and public participation in strategic decision making: implications for emerging technologies. *Ambio* 28(6): 569-574.

Hunold, C., and I.M. Young. 1998. Justice, Democracy and Hazardous Siting, *Political Studies*, XLVI, 82–95

Kasperson. R.E. 1986. Six Propositions on Public Participation and Their Relevance for Risk Communication. *Risk Analysis* 6(3): 275-281.

Kasperson, R.E., O. Renn, P. Solvic, H.S. Brown, J. Emel, R. Goble, J.X. Kasperson and S. Ratick. 1988. The social amplification of risk: A conceptual Framework. *Risk Analysis* 8(2): 177-187.

Kuhn, R.G., and K.R. Ballard 1998. Canadian innovations in siting hazardous waste management facilities, *Environmental Management* 22(4) 533–545.

McComas, A.K, and C.W. Trumbo. 2001. Source Credibility and Environmental Health-Risk Controversies: Application of Meyer's Credibility Index. *Risk Analysis* 21(03); 467-480.

McComas, K.S. 2001. Public Meetings about Local Waste Management Problems: Comparing participants to Non-participants. *Environmental Management* 27(1): 135-147.

Petts, J. 1994. Effective Waste Management: Understanding and Dealing with Public Concerns. *Waste Management and Research* 12(1): 207-222.

Petts, J. 1997. The public-expert interface in local waste management decision: expertise, credibility and process. *Public Understanding of Science* 6: 359-381.

Petts, J. 2000. Municipal Waste Management: Inequities and the Role of Deliberation. *Risk Analysis* 20, No 6.

Rowan, F., 1996. The High Stakes of Risk Communication. *Preventive Medicine* 25: 26-29.

Sandman P.M., P.M. Miller, B.B. Johnson and N.D. Weinstein. 1993. Agency Communication, Community Outrage and Perception of Risk - 3 Simulation Experiments. *Risk Analysis* 13(6): 585-598.

Siegrist M., and G. Cvetkovich. 2000. Perception of Hazards: The Role of Social Trust and Knowledge. *Risk Analysis* 20(5): 713-720.

Siegrist M., G. Cvetkovich and C. Roth 2000. Salient Value Similarity, Social Trust, and Risk/Benefit Perception. *Risk Analysis* 20(3): 353-362.

Siegrist. M. 2000. The Influence of Trust and Perceptions of Risks and Benefits on the Acceptance of Gene Technology. *Risk Analysis* 20(2): 195-204.