

Assessment of Catchment Partnership Health: Using the Goal Attainment Scaling Technique

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ABSTRACT

During the last two decades federal, state and local government agencies and community in the Goulburn Broken Catchment have worked together to achieve significant gains in natural resource management. This has been possible through all parties working together in partnership for the common cause. But what do we mean by partnership? Can we identify the principles of effective partnership? Is it possible to assess these partnership principles so they can be strengthened and improved?

This paper outlines eight principles of effective catchment partnership. These are:

Mutual benefits: All parties benefit from their dealings with each other.

Collaboration: Cooperation is used instead of competition.

Good governance: We make good decisions and manage processes well.

Acknowledgment and respect: We recognise and advocate for our partners.

Roles and responsibilities: Our boundaries are clear and understood by each other.

Differences: We identify and resolve our negative differences early.

Commitment: We have a shared long-term vision, dedication and trust.

Communication: Our communications are open, honest, on-going, formal and informal.

The paper then uses the Goal Attainment Scaling technique, an evaluation methodology, to describe the achievement of partnerships at various level of success. Use of this tool helped develop a shared understanding and ownership of how to improve partnership health. The regular use of this technique and associated discussions provided direction for how the partnership could be strengthened and improved.

Key words: *partnership principles, shared understanding, Goal Attainment Scaling*

INTRODUCTION

Improving natural resource management is a complex and challenging area of work, and in order to be effective in an enduring way, a range of success factors need to be in place. One important factor is the community ownership of (a) natural resource management issues and (b) the development of partnership among the relevant government agencies and the community. Some of the matters associated with partnerships are quite manageable, while others are dynamic, complex or otherwise difficult, and some of these matters might even be thought of as jointly incompatible, antagonistic or unmanageable.

During the last two decades federal, state and local government agencies and the community in the Goulburn Broken Catchment have worked together, in partnership, to achieve significant natural resource management gains.

This article outlines a process adopted to define, evaluate and improve the essential partnership arrangements for natural resource management. The work was carried out within the Shepparton Irrigation Region portion of the Goulburn Broken Catchment Management Authority area in northern Victoria.

PARTNERSHIP APPROACH AND ITS ASSESSMENT

Need for a partnership: While a formal, integrated catchment management strategy, the “Goulburn Broken Regional Catchment Management Strategy”, has been in place in the

region since 1988, and partnership arrangements have been seen as important, the more formal definition of partnership did not commence until 2005 (Cumming et al 2005).

This definition of partnerships did not occur earlier, perhaps because organisational relationships were seen broadly as being healthy and the expected way to work together, as a result of a culture built up over many years. Documenting the partnership approach was also seen as a difficult task, and thus had not been undertaken. Meanwhile, the external operating environment was changing with new issues arising, including significant policy change and long term drought.

However, the greatest threat to the partnership was the potential loss of key individuals through retirement with a consequent loss of the partnership culture. There was evidence that partnerships in other Catchment Management Authority areas were under strain, and there was a strong desire to prevent this occurring in the Goulburn Broken Catchment area.

Setting up the partnership arrangements: The first step in defining an effective Catchment partnership was to reflect on the purpose, goals and achievements of the catchment Management Strategy, while also considering the essential characteristics and behaviours of key parties when partnering successfully. These key parties were involved in directing, managing and participating in the implementation of the Catchment Management Strategy. They include government agencies and the overseeing community bodies, committees and boards.

The essential characteristics identified as key principles of a successful partnership included the implicit, and sometimes unstated, issues associated with organisational values, and with the supporting processes or agreements. These principles have rarely been discussed, acknowledged and documented previously. The purpose of this paper is to make these principles explicit, well defined, agreed, documented and in a form which would allow them to be used to track progress and provide insights for improvement.

Eight key principles of effective catchment partnership: An important part of developing this paper was to identify and describe the key principles of partnership as exhibited in the Goulburn Broken Catchment.

The eight principles are:

- **Mutual benefits:** All parties benefit in their dealings with each other.
- **Collaboration:** Cooperation is used instead of competition.
- **Good governance:** We make good decisions and manage processes well.
- **Acknowledgement and respect:** We recognise and advocate for our partners.
- **Roles and responsibilities:** Our boundaries are clear and understood by each other.
- **Differences:** We identify and resolve our negative differences early, and welcome diversity.
- **Commitment:** We have a shared long-term vision, dedication and trust.
- **Communication:** Our communications are open, honest, on-going, formal and informal.

These principles, in a fuller form, were discussed with the relevant agencies working within the catchment. The principles were refined and ultimately accepted by each and all of the partners.

A Memorandum of Understanding was prepared that outlined the principles of partnership, how they would be expressed and a commitment to the key principles. This memorandum was signed by the major partners: the Goulburn Broken Catchment Management Authority, the Department of Primary Industries, the Goulburn Murray Water Authority and the Environmental Protection Authority (2006).

Evaluation, review and improvement: Evaluation, review and improvement are intrinsic to sustaining the effective, efficient and appropriate delivery of natural resource management programs such as those in the Goulburn Broken Catchment.

In order to appraise the performance of the contributions of individual agencies to the partnership, an evaluation process was designed to determine catchment partnership health using the evaluation methodology known as Goal Attainment Scaling.

What is Goal Attainment Scaling? Goal Attainment Scaling is an evaluation methodology that involves the development of an outcome scale to measure an individual's or group's progress towards achieving identified goals. Goal Attainment Scales are generally developed to focus on the goals that are targeted for change by a specific program. At its simplest, this involves setting a broad goal, implementing a program, determining how well each nominated sub-goal area has been achieved, at various times during the life of the program, and finally, using this information to determine any changes that are required in future activities (Kiresuk and Lund 1978).

Goal Attainment Scaling has been commonly used in the mental health fields to assist therapists and patients to assess the progress towards achieving individual and organisational goals. Goal Attainment Scaling has also been commonly used in the fields of education, rehabilitation, medicine, corrections, nursing, social work and chemical dependency (Kiresuk, Smith and Cardillo 1994). In Australia, Goal Attainment Scaling was used by "Primary Industries and Resources South Australia" as an assessment tool that required stakeholders "to participate in evaluating and seeking consensus on the most important aspects of the goals to be achieved within a particular time frame, and the range of expected outcomes of the activities" (Primary Industries and Resources SA 1998 p.3).

Kiresuk, Smith and Cardillo (1994) describe the following nine step process as a training guide to assist in the development of a Goal Attainment Scale:

- Step 1: Identify the issues that will be the focus of the treatment.
- Step 2: Translate the selected problems into at least 3 sub-goals.
- Step 3: Choose a brief title for each sub-goal.
- Step 4: Select an indicator for each sub-goal.
- Step 5: Specify the expected level of outcome for the sub-goal.
- Step 6: Review the expected level of outcome.
- Step 7: Specify somewhat more and somewhat less than expected level of outcomes for the sub-goal.
- Step 8: Specify the much more and much less than expected levels of outcome.
- Step 9: Repeat these scaling steps for each of the three or more sub-goals.

A typical Goal Attainment Scale will look like this:

Date of Initial Observation: / / 20
 Date/s of Follow Up Observations: / / 20

Description of the Overall Goal to be Attained:				
	Rating	Sub-Goal Area 1	Sub-Goal Area 2	Sub-Goal Area 3
weights (if any)				
Description of the best expected result	+2			
Description of a better than expected result	+1			
Description of the expected result	0			
Description of a less than expected result	-1			
Least favourable expected result	-2			
Name of Observer: _____				
Date / /20	SCORE:			
Name of Observer: _____				
Date / /20	SCORE:			

When developing a Goal Attainment Scale, it is intended that the sub-goal areas and the related outcomes are clear and consistently defined and observable. When developed in this way, others are able to use the Goal Attainment Scale to decide on a score, even if they have not been involved in its preparation providing that they have been adequately trained to interpret the observations appropriately.

Team approach: A team from the Department of Primary Industries working to deliver the natural resource outcomes developed the partnership Goal Attainment Scale. As a first step they defined what they considered were important indicators of a partnership.

A workshop approach was used to consolidate the different views of partnership and established a shared understanding within the group. Through this process, the group was able to outline the eight principles of effective catchment partnership that they considered to be important in the Goulburn Broken Catchment. These principles were described briefly in the last section of this paper. The workshop process was important, as it enabled team members to internalise a shared understanding of what partnership meant to the group and how the principles were developed from their contributions.

All the eight principles of partnership were then used as sub-goal areas in the partnership Goal Attainment Scale. As well as naming these goal areas, the team also develop an aim for each of these goals. For each goal area, the group described its aim as the best results or observation if the goal were fully achieved. For example, under the “mutual benefits” principle, the aim described was that - “all parties benefit from their dealings with each other”. This is an additional step to those identified by Kiresuk, Smith and Cardillo (1994).

The team considered that this was an important additional step as it assisted them to focus on each of the individual sub-goal areas and develop a shared understanding of the partnership approach. This ensured that when establishing the outcomes for each of the sub-goal areas, all of the participants were clear about the particular outcomes that the partnership aimed to achieve.

In keeping with the nine step process, the project team also selected indicators for each goal and began to describe outcomes. Kiresuk and Lund (1978) suggested starting with the “expected level” of outcomes first and then to begin to identify the outcomes that were “much more” and “much less” than the expected level. However, the team found it was easier to start with the most and least expected outcomes first, that is the “much more expected” and “much less expected” levels of outcome, rather than starting with the “expected” level of outcomes.

The development of an agreed Goal Attainment Scale required several meetings. These meetings included many discussions about which “observables” would be used as indicators to assess the subjective attainment of sub-goal areas for each of the principles. A member of the team, who had previous experience with Goal Attainment Scales facilitated the development of the Scale. A final review meeting was held to discuss the scale, and how it would be used to evaluate the partnership approach in various forums.

Figure 1 illustrates the result of the Goal Attainment Scaling process used by the team. This Scale shows the main goal with its sub-goals along the top of the scale, aims and range of expected levels explored through the Goal Attainment Scaling process.

Figure 1: Goal Attainment Scaling for Partnership Health

Goal: Effective Partnership Health within the Catchment				
Sub-Goal Areas ("8 Key Principles")	1. MUTUAL BENEFITS	2. COLLABORATION	3. GOOD GOVERNANCE	4. ACKNOWLEDGMENT AND RESPECT
Aim	All parties benefit from their dealings with each other.	Cooperation is used instead of competition.	We make good decisions and manage processes well.	We recognise and advocate for our partners (events and documents).
<i>Much more than expected</i>	Benefits always flow for all parties from all interactions	Parties pro-actively provide contributions and ideas for each other to secure funds, information and opportunities	Range of regular and effective decision making processes based on data and are community driven achieving transparent, open, honest management of programs	At all opportunities we acknowledge, are positive about, and show respect for our partners, leading to credible and better service delivery
<i>More than expected</i>	Benefits usually flow for all parties from all interactions	Parties sometimes provide contributions and ideas for each other to secure funds, information and opportunities	Less regular decision making processes based on inconsistent data and are community driven	At most opportunities we acknowledge, are positive about, and show respect for our partners
<i>Expected level of success</i>	Some interactions benefit all parties	Parties do not actively consider the issues of collaboration and competition	Some effective decision making processes, with some community involvement, with inconsistent and limited data	Positive acknowledgment of other parties is inconsistent
<i>Less than expected</i>	Some interactions benefit some parties	Parties sometimes compete for funds and resources	Inconsistent processes for decision making based on little data	Positive acknowledgment of other parties is uncommon
<i>Much less than expected</i>	Dealings between parties never benefit both	Parties compete vigorously for funds and resources	We have no regular or effective processes for decision making	Positive acknowledgment of other parties is rare

Goal: Effective Partnership Health within the Catchment (continued)				
Sub-Goal Areas (“8 Key Principles”)	5. ROLES AND RESPONSIBILITIES	6. DIFFERENCES	7. COMMITMENT	8. COMMUNICATION
Aim	Our boundaries are clear and understood by each other.	We identify and resolve our negative differences early.	We have a shared long-term vision, dedication and trust.	It is open, honest, on-going, formal and informal.
<i>Much more than expected</i>	Parties identify and act on opportunities to refer to other agencies/ clients and take opportunities to describe Roles and Responsibilities for each other and focus on improving understanding of Roles and Responsibilities	Synergies achieved: differences in perspective are sought and worked through informally - staff meetings and formally - Technical groups	Each organisation has a business plan which 1. Demonstrates commitment to Regional Catchment Strategy, and 2. Encourages and supports devolution of decision making to catchment level	All observations show best possible partnership communication
<i>More than expected</i>	Parties identify and act on opportunities to refer to other agencies/ clients and take opportunities to describe Roles and Responsibilities for each	There are some learnings or changes coming from discussion of differences. We don't often seek different perspectives	Each organisation has business plans which clearly documents commitment to the Regional Catchment Strategy and is regularly demonstrated	Positive language predominates all communications; consistent with our mutually agreed goals; includes formal and informal; and is jointly understood
<i>Expected level of success</i>	Parties understand each others roles and responsibilities	There are processes to discuss differences but there are no collective learning or actions/ changes resulting	Each organisation has business plan which acknowledges commitment to Regional Catchment Strategy (RCS), but demonstration is inconsistent	Positive language mostly used on a regular basis, but not completely open and consistent with our mutually agreed goals
<i>Less than expected</i>	Parties understand our own roles and responsibilities	Ad hoc processes/ not embedded in everyday behaviours	Each organisation acknowledges commitment to RCS and provides little demonstration	Parties sometimes meet regularly, and communications are often antagonistic or publicly critical
<i>Much less than expected</i>	There is no understanding or description of respective Roles and Responsibilities	There is no process or forum to identify or resolve negative differences	Our (Regional Catchment Strategy) goals and aims are incompatible and not jointly agreed	Parties do not meet regularly and communications are often antagonistic or publicly critical

DISCUSSION

Goal Attainment Scaling is a methodology that allows monitoring of how well a program or project is achieving its **expected** results. In our case, the methodology was used to assess the **partnership health** in delivering catchment outcomes within the Goulburn Broken Catchment, which is a complex and challenging area of work. Experience has shown that other catchments lack a “healthy partnership approach”, it is very difficult to effectively, efficiently and appropriately deliver the natural resource management outcomes.

The following are some of the learning outcomes associated with developing this Goal Attainment Scale:

- **Shared understanding:** The development of the Scale not only helped the group to assess the strength and the weaknesses of the partnership approach, but it also helped the team to understand and develop a shared understanding of “partnership health”. This process has allowed members of the project team to discuss and describe what “partnership health” means to them, and then to develop specific goals and aims that provide them with a clear picture of the behaviours and attitudes exhibited by the partners. This process helped team members to prepare the operational definition of the complex concept “partnership”, which assisted the team to communicate this concept to other stakeholders.
- **Rigour in the process:** A draft Goal Attainment Scale for Partnership Health was initially developed by a more experienced team member. This draft was communicated to the larger team. The whole team was involved in the further development of this Scale. This involvement added rigour through discussion of different people’s ideas and opinions. The process helped team members to internalise the concept of “partnership health” through active participation in the development of the Scale. By incorporating diverse views, a much richer definition was developed by the group than had been available in the first draft of the Scale.
- **Clear vision of partnership health:** The team now has a shared understanding of the content and concepts referred to in the Goal Attainment Scaling. Team members can clearly understand what to look for as indicators of partnership health and have a clear view of the goals that they are working to achieve. As a result of consultation and agreement with all partners, all partners and staff members working in the delivery of natural resource management outcomes are confident that all stakeholders can work together to achieve the outcomes that the partnership aims to achieve.
- **Modification of the process to fit the situation:** Some changes were made to the nine step process identified by Kiresuk, Smith and Cardillo (1994). The team worked on specifying an aim for each of the sub-goal areas before identifying the various “expected” indicators. This helped the team to focus on goals much more rigorously.

Another challenge faced by the team was agreeing about the **expected** levels of outcome for the sub-goal areas. Although the literature explains that the ‘expected level of outcome’ is the outcome that is most likely to occur, it was felt that this may vary for different stakeholders and in different situations. The expected level was eventually agreed for each of the sub-goal areas, however, it should be noted that there is a need for these outcomes to be reviewed with different stakeholder groups.

- **Support from other methods:** Goal Attainment Scaling provided us with “raw data” on the state of partnership health at any given point. As with other evaluation data, the Goal Attainment Scaling data must be analysed, interpreted and assessed for reliability and validity. Our experience is that this tool should not be used as the only source of data.

In order to detect any bias that is built into this technique, evaluation practitioners always need to use at least two completely different methods of measuring program

progress and results. Use of two or more methods to collect and analyse data will help in the “triangulation” process to remove biases from only one technique.

A series of processes is currently under way to assess the health of the partnerships in all the governing and oversighting bodies and committees within the Shepparton Irrigation Region. This information is being collected and analysed to give insights and help lead discussion on improving working relationships and governance across the broad range of work within the catchment.

Some key learnings which have emerged from this process include: a shared understanding of partnership principles is imperative and only develops over time; involvement in development leads to internalisation of the principles; the evaluation process provides strong guidance to strengthening the partnerships and team performance when delivering a program. There is a strong commitment to ongoing improvement.

CONCLUSIONS

Natural resource management is an important, but complex area of work in which a healthy partnership involving various stakeholders and community members is crucial. Program staff working to deliver the Goulburn Broken Regional Catchment Strategy were aware that effective partnership was critical to the delivery of their programs. While they observed that each partnership was generally working well, they did not really understand why this was occurring. The challenge was to identify key principles of effective partnership and then develop a tool to monitor its health.

It was important for the project team to identify a technique that would enable an assessment of partnership health and at the same time assist the team to develop its own vision or goals for partnership that all partners could aspire towards achieving. The process of developing a Goal Attainment Scaling has provided a process of building a shared understanding of partnership health and the potential for the resulting scale to be used as an assessment tool to review each program in terms of its partnership health.

The development of a Partnership Health Goal Attainment Scale has enabled us to better appreciate what makes an effective partnership. This Scale is now being used to assess and understand more fully the state of the partnership within the Goulburn Broken Catchment.

REFERENCES

Cumming B, Sampson K, O’Kane W, Hunter T (2005). *Strategic Statement: Sustainable Irrigated Landscapes, Goulburn Broken*, Tatura: Department of Primary Industries.

Cumming B, Thompson B (2006). *Catchment Partnership Memorandum of Understanding*, Tatura: Department of Primary Industries.

Kiresuk T and Lund S (1978). Goal Attainment Scaling. In C. Attkisson, W. Hargreaves, M. Horowitz, and J. Sorensen (Eds), *Evaluation of Human Services Programs*. New York: Academic Press.

Kiresuk T, Smith A and Cardillo J (1994). *Goal Attainment Scaling: Applications, Theory and Measurement*, Hillsdale: Lawrence Erlbaum.

Primary Industries and Resources South Australia (1998). *Field Guide for the Environmental Assessment of Abandoned Petroleum Wellsites in the Cooper Basin*, South Australia: PIRSA, Adelaide, South Australia.