

REGIONAL MONITORING PARTNERSHIPS FOR WATERWAY HEALTH.

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ABSTRACT

The Australian Government's natural resource management programs the National Action Plan for Salinity and Water Quality (NAPSWQ) and the Natural Heritage Trust 2 (NHT2) are based on a regional community-based approach to planning and implementation built on the concept of 'healthy regional arrangements'. This new regional approach has significant implications for how stakeholders including whole of government, industry and community networks work together. The new arrangements have generated significant demand for information on waterway condition that in turn highlights the need for collaborative partnerships in regional waterway monitoring.

Successful regional monitoring partnerships can improve the efficiency and effectiveness of data collection, and thus enhance the capacity of constituent stakeholders to address ecological issues at a range of scales. In this paper we document the role of the State Community Monitoring Team in supporting regional monitoring partnerships through a range of projects at catchment to state-wide scales. The learning's associated with these activities have enabled the development of a State Community Monitoring Framework, which maps future state support to community monitoring in Queensland.

INTRODUCTION

In their regional NRM plans the Queensland Regional Bodies have prioritised where they need Australian and State government investment to get the best natural resource management (NRM) outcomes. One of the more costly aspects of these plans will be the monitoring of natural resource condition targets and the scope of monitoring needed to fill the existing knowledge gaps in some of the very large regions. Community waterway monitoring is recognised as key within regional monitoring programs and is crucial to build regional capacity in the management of natural resources. Similarly the role and value of community waterway monitoring (Waterwatch) is identified in the Reef Water Quality Protection Plan.

This paper explores the current "state of play" for community water monitoring groups within Queensland, particularly in regard to the significant changes that the shift to regional NRM has brought and discusses the State's response to ensure support for, and the continuing viability of, community water monitoring.

Growing concern and awareness about the health of our waterways has resulted in greater community willingness to be involved in monitoring, on-ground action and decision-making about the management of our natural resources. In the past community monitoring has generally operated quite independently of other strategic agency monitoring programs and has been successful in involving communities in the monitoring and management of waterways and catchments. Figure 1 illustrates some key attributes of independent community and agency based monitoring programs.

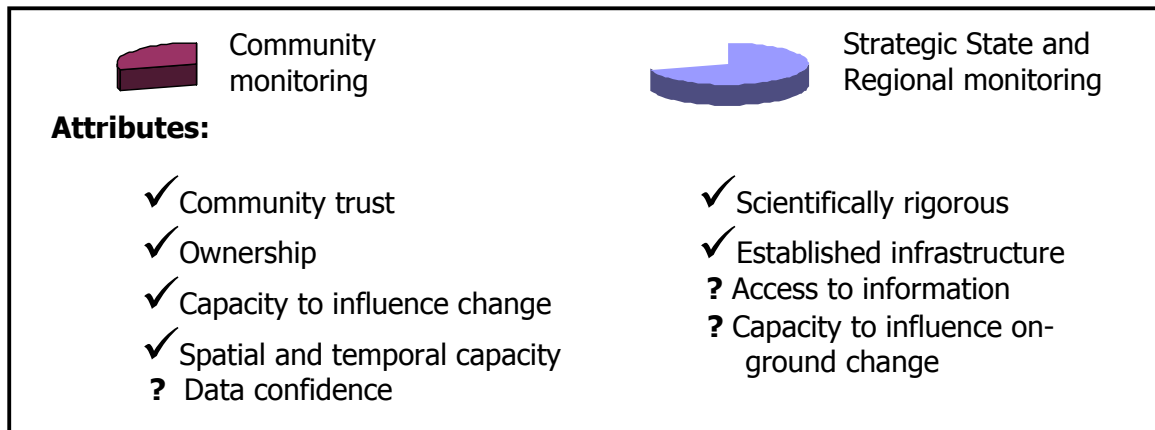


Figure 1. Attributes of independent community and agency monitoring programs

Community monitoring programs have generated increased awareness and understanding of catchment and water quality issues and instilled a sense of trust and ownership in the information collected and promoted wider community stewardship and responsibility for the future health of our waterways and catchments. Most community monitoring groups have an exclusively local or regional focus, where their proximity to site (spatial capacity), understanding of context (local knowledge) make their potential contributions particularly valuable. However the usefulness of community generated data and it’s subsequent contribution to NRM and decision-making is often called into question by agencies and scientists. Some of the primary reasons for this relate to concerns over the reliability and integrity of the data (data confidence).

In contrast state agency and regional monitoring programs have usually been developed with a focus on scientific rigour and are maintained through significant investment in infrastructure. However, broader community access to agency collected data and the capacity of this information to influence on-ground change and improvement in water quality has often been called into question.

Clearly, there are opportunities to integrate these characteristics (put the pieces of the pie together) to achieve monitoring programs that are able to better meet the needs of the on-ground stakeholders and the relevant NRM organisations. This opportunity becomes even more compelling under the revised institutional arrangements associated with regional NRM.

Over the last three years the State Community Monitoring Team has been focussing efforts on supporting strategic regional monitoring partnerships involving community monitoring and other agency and regional monitoring programs. This approach enhances the complimentary attributes of individual programs, enabling coordinated monitoring partnerships that are supported by best-available science; ensuring community trust, ownership and improved understanding of the issues; and which provide effective solutions at appropriate scales.

The role of State support to community water monitoring in recent years has changed to reflect the changes associated with regional NRM arrangements. The state no longer directly coordinates community monitoring or devolves funding as it did under NHT1, rather it supports and promotes community monitoring and the valuable contribution that such activities and participating organisations make.

STATE COMMUNITY MONITORING TEAM’S ROLE

The State Community Monitoring Team support Queensland’s community waterway monitoring networks including Waterwatch, Landcare, Bushcare, Coastcare and Catchment Management groups. This team also works directly with other NRM stakeholders including but not limited to Australian, State, and Local Government Agencies, Regional NRM bodies, Industry, Traditional Owners and Research providers.

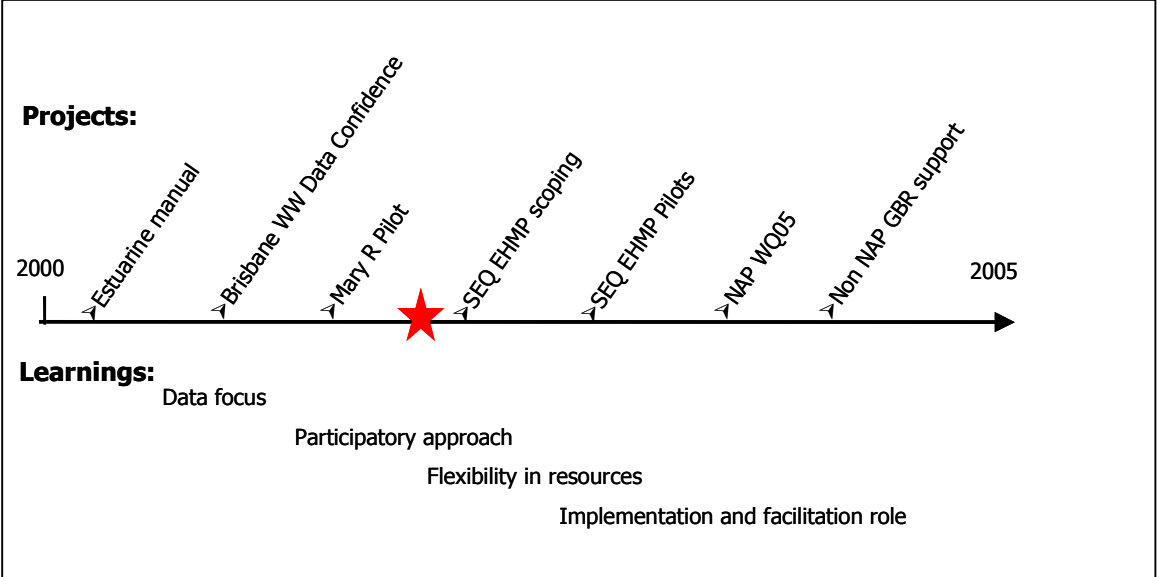
Broadly, the State Community Monitoring Team role is to:

- Improve broad stakeholder understanding of community waterway monitoring networks and their significant contribution to natural resource management.
- Develop and implement products and tools to enhance communities’ contribution to waterway monitoring and natural resource decision-making.
- Broker and support waterway monitoring partnerships between community monitoring networks and other NRM stakeholders.

The State Community Monitoring Team draws upon significant experience in projects supporting community monitoring to develop strategies to ensure the success of community capacity building projects and ultimately successful and sustainable monitoring partnerships.

Over the last four years a number of projects have been undertaken to support regional monitoring partnerships. Significantly these projects have straddled the transition from NHT1 to the regional arrangements driven by NHT2 and NAPSWQ (identified by star - Figure 2).

Figure 2. State projects supporting regional monitoring partnerships
 (SEQ – South East Queensland, EHMP – Ecological Health Monitoring Program, NAP WQ05 – National Action Plan – Water Quality Project 5, GBR – Great Barrier Reef)



Catchment and Regional Projects

Catchment-scale pilot studies in Brisbane and Mary River catchments focussed on addressing data confidence issues associated with community monitoring data through the development and delivery of data confidence protocols. Although highly successful in promoting the collection of data of appropriate standards (not necessary the highest quality), by their nature these studies focussed on the contribution of “data” rather than the valuable contribution community monitoring provides in terms of social capital and influencing social change.

The EHMP Capacity Building Scoping task and subsequent pilot projects support the integration of community, local government and industry based monitoring programs into a broader strategic regional program for SEQ. To ensure the success of these pilots it will be critical to understand different stakeholders motivation for participation, at what scale this is relevant, and to facilitate opportunities for identifying and achieving common goals that meet the needs of multiple stakeholders.

Cross Regional And State Level Projects

Community waterway monitoring is recognised as a key component in regional monitoring programs and is crucial in building regional capacity in the management of natural resources. Similarly, a number of cross regional projects e.g. Great Barrier Reef Marine Monitoring Program, have identified community involvement as a essential component of broader monitoring. To support these initiatives and meet a broad range of issues, objectives, methods and data quality requirements many regions have developed specific regional, or multi-regional, monitoring guidelines and procedures.

State level projects including the NAP Water Quality Strategic Investment Project (SIP) WQ05 project and Great Barrier Reef Technical Support project support regional priorities. A State Community Monitoring Framework is being developed to provide standardised and user-friendly tools and have the flexibility to integrate with regional guidelines. Besides the development of tools significant resources have been allocated towards the implementation of these tools and to facilitate regional monitoring partnerships.

THE STATE COMMUNITY MONITORING FRAMEWORK

The NAP SIP WQ05 project will lead the development and delivery of the State Community Monitoring Framework (Figure 3). The key components of the framework are:

Vision:

To enhance community monitoring capacity to contribute to regional monitoring partnerships and support the integration of community based resource condition information into regional, state and national frameworks.

The components of the framework to support the vision outlined above have been identified based on a state-wide review of community monitoring capacity, needs, gaps and regional priorities (Cawley, 2004). Additional information was obtained through consultation with NAP Regional NRM Bodies and direct interaction with community monitoring networks during NAP WQ05 training workshops.

Resources:

The framework provides technical reference materials, decision support tools and guidelines for community monitoring networks. These include:

- The *Monitoring Plan Tool* will aid the development and communication of community monitoring plans. It will also be a valuable ‘action learning’ tool to facilitate the development and endorsement of monitoring plans among broad NRM stakeholders.
- The *Technical Reference Manual* will be delivered through modules focussing on:

- Monitoring Program design
- Data management, interpretation and reporting
- Sampling guidelines for physico-chemical, biological and stream condition and groundwater monitoring.

The *Data Quality Methods Guide* will provide valuable information to ensure the selection of methods is appropriate to the indicator to be measured and the quality of the data required.

Delivery:

Training workshops will be delivered in regions, focussed on the implementation of resources and tools and the facilitation of strategic water quality forums and advice. Strategic training has been focussed on supporting the implementation and evaluation of resources.

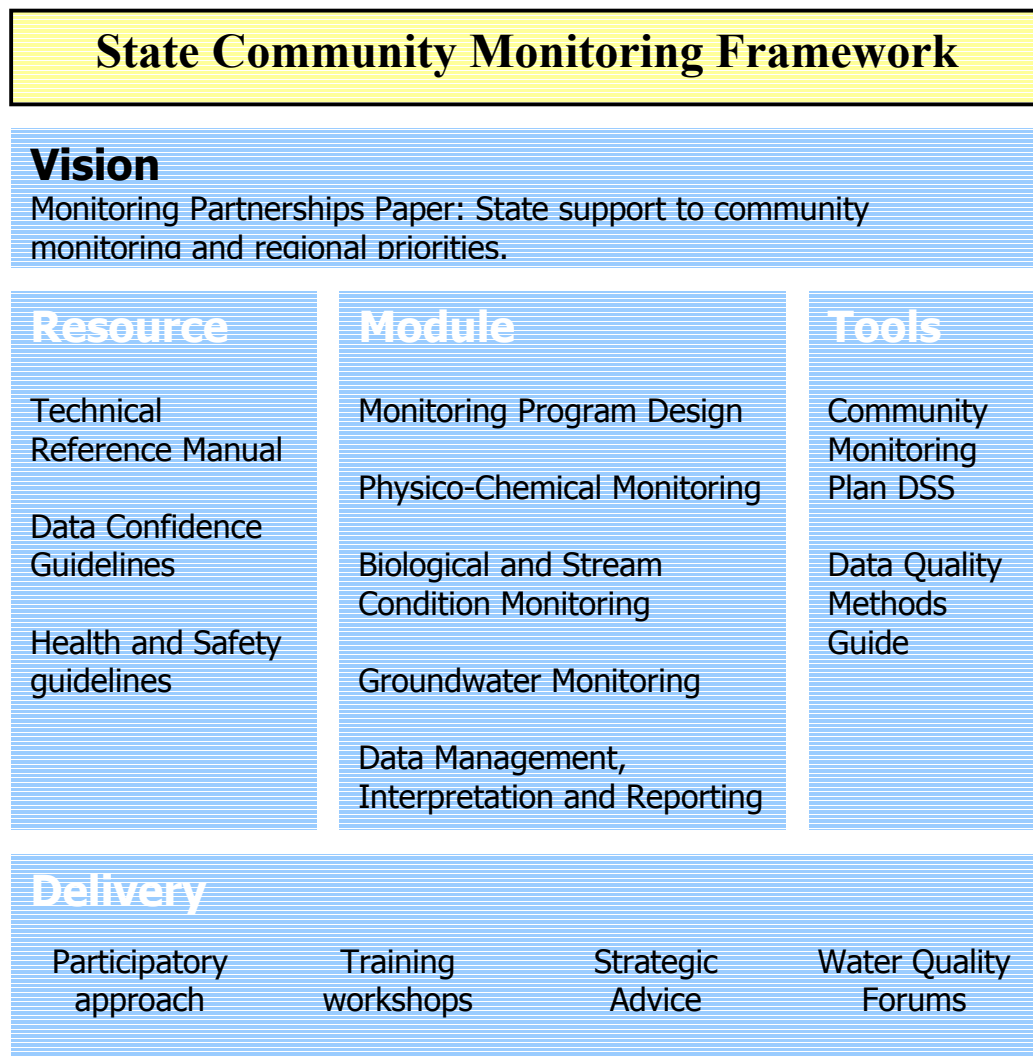


Figure 3. State Community Monitoring Framework

CONCLUSIONS

Undoubtedly, the decentralisation of NRM and the devolution of investment strategies to Regional Bodies have altered the existing arrangements for community water monitoring. The transition period in particular, during which regional NRM plans and Regional Investment Strategies have been developed, has proven to be difficult times for many community groups as the reporting and funding arrangements associated with NHT1 have given way to those of NHT2 and NAPSWQ.

However, regional arrangements are likely to bring new opportunities for regional communities to become re-involved in NRM and to make positive contributions at a regional scale. In particular, there is an increasing awareness of the value of community collected water quality data sets both for setting regional investment priorities and for Monitoring, Evaluation and Reporting towards management action and resource condition targets.

Community monitoring networks are evolving too, they can now better perceive a clear role within region NRM and enhanced appreciation and value for their knowledge and the data they collect. Increasingly, monitoring activities are becoming more collaborative and there is greater emphasis on the data collected, while retaining the merits of engaging, educating and motivating the broader community.

The recognised value of community collected data, and newly established regional investment, has shifted the role and focus of State support to community groups. The State Community Monitoring Team focus is now on supporting regional priorities and ensuring the State Community Monitoring Framework compliments and adds value to the broad range of existing and future regional initiatives.

The State role has also become that of a partnership broker, working to promote the value of community participation in NRM and providing innovative solutions aimed at improving data confidence associated with community water quality and stream health data. This approach enhances the complimentary attributes of individual programs, enabling coordinated monitoring partnerships that are supported by best-available science; ensuring community trust, ownership and improved understanding of the issues; and which provide effective solutions at appropriate scales.

REFERENCES

Cawley, R. (2004). 'Community Water Quality and Stream Health - Monitoring Survey: Review Document' - State Community Monitoring Team, Queensland Government. Unpublished Report.