

‘WatchMan’ – A Database to Manage Key Performance Indicators of a Regional Waterwatch Program

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Introduction

With the establishment of any new environmental program like Waterwatch, there are a number of phases through which the program moves as it seeks to gain acceptance in the community. In Victoria, much effort initially went into creating a program that satisfied the needs of the community (the clients), and convincing state and commonwealth government agencies and industry (the sponsors) of the program’s great potential in raising awareness of water quality issues. We measured our success simply by counting the amount of sponsorship we received and tallying the number of regional programs in operation.

As Water Authorities, Catchment Management Authorities and local government saw the value of Waterwatch and spent more money to support their Waterwatch projects, reporting requirements also became more onerous.

The Waterwatch programs of today look very different from the fledgling projects of ten years ago. They utilise a range of techniques, not just water quality monitoring, to raise community awareness of water quality issues. All educational institutions are targetted, from primary to tertiary level, as well as the full range of community groups such as Landcare and environmental groups, youth and mature age organisations, to promote the importance of protecting our most important resource...our waterways.

Objectives of Waterwatch

A modern Waterwatch programme has the twin objectives of raising awareness of water quality issues through community monitoring and, in the process, of collecting meaningful and valid water quality data. In describing the success of a Waterwatch program, a variety of performance indicators are needed to match these two objectives.

With regard to the educational and awareness raising objective, success of a program can be determined at a number of levels of sophistication. Simply counting the numbers participating in the various activities of the program gives some measure of its popularity. This, of course, does not give an assessment of the program’s effectiveness. Surveys, questionnaires, case studies and higher level research projects are needed to measure the changes in community behaviour that may result from any awareness raising activities.

Most regions now place great emphasis on collecting and using water quality data. This has become necessary because of the growing demand for Waterwatch data from Government Agencies and private consultants. If you are collecting data for awareness purposes, it is also logical to try and make sure that the data is of high quality.

To improve the standard of community data, regions are now preparing Data Confidence Plans, which specify how a monitoring program should operate. The Plans assist groups in developing more effective monitoring programs and ensures the quality of their data. One

measure of the success of monitoring by a Waterwatch group is obtained by tracking the implementation of a Data Confidence Plan.

Performance Indicators

The strategies used to raise awareness of water quality issues in schools include water quality monitoring, habitat assessments, pantomimes on a water theme, competitions and many other activities that fit the requirements of the school curriculum. The numbers of students involved in activities organised by Waterwatch staff is an obvious measure of the health of a Waterwatch program. Other indicators may be the number of schools that include Waterwatch in their syllabus, the number of requests from teachers for information on water quality and the number of schools backing up each year to be involved in Waterwatch. These numbers are easily collected, collated and reported upon. Sponsoring and hosting organisations would normally demand this information as a minimum reporting requirement.

Awareness of water quality issues in the community can similarly be described by the number of people participating in community events, the number and array of articles published in all media and the number of requests for information on water quality.

In the general community, the success of Waterwatch data collection activities can be quite easily measured using the number of active community monitoring groups, the number of sites being monitored and the frequency and extent of monitoring at each site. The Waterwatch Australia Database provides an ideal tool to store and report on these indicators. Standard reports are available within this program.

Performance indicators may also be employed to demonstrate the effectiveness of a region's Data Confidence Plan and thereby give some indication of data quality. Aside from setting up parallel testing of a sample with a professional laboratory, two easily measurable components of the data collection process that can be reported upon are the training of monitors, and the maintenance and calibration of equipment. To properly implement a Data Confidence Plan, a regional program needs to maintain exhaustive records of the training history of each monitor, and the maintenance and operation of each piece of testing equipment. This information is often recorded in long-hand in record books or placed on sometimes unwieldy spreadsheets.

WatchMan - The Database

The Goulburn Broken Regional Waterwatch Program has developed an easy to use Access-based database called *WatchMan* (Waterwatch Management Database) that enables the storage and reporting of awareness and education performance indicators and some of the information required to properly implement the Data Confidence Plan in a region. It is designed specifically for a regional Waterwatch Program. It is sufficiently flexible and adaptable to be useful for most regional programs. *WatchMan* has a range of independently operating components that may or may not be utilised by a region. For example, a region may choose to only use its capability to store and report on participation in their Waterwatch program, and still receive great value from the database.

The database is a run-time version, thus eliminating the need for the full Microsoft Access Program to be loaded onto a computer.

The *WatchMan* Program Management Database is available from:

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