

# Surface Water Integrated Management (SWIM) Strategy 2014



Prepared for SWIM by Karen S Bell and Landcare Research



## Introduction and Purpose

This document provides the high level strategic direction for the Surface Water Integrated Management (SWIM) Special Interest Group (SIG) comprised of representatives from regional councils and unitary authorities nationwide. The development of this strategy is viewed as a means of enabling opportunities for SWIM by being proactive and strategic about research priorities, rather than waiting and responding to challenges when they arise.

A strategy is needed because such a framework will enable SWIM to:

- identify, prioritise and address information and science needs,
- better inform decision-making and leverage off external research activity,
- influence and advise decision-making for policy and plans, and provide evidence-based support for policy and plan making processes, and
- collaborate nationally and with external agencies to achieve common objectives across the freshwater management sector.

## Context

There are multiple drivers and priorities for freshwater research in New Zealand. These drivers include (but are not limited to):

- the Resource Management Act (RMA) provisions,
- National policy and research initiatives, such as national policy statements, particularly the National Policy Statement: Freshwater Management and the New Zealand Coastal Policy Statement,
- the National Objectives Framework and related initiatives,
- the Science Challenges process,
- the RMA reform process,
- MfE national reporting requirements and the Environmental Reporting Bill,
- land and water reforms
- regional scale priorities such as:
  - councillor priorities,
  - community expectations and
  - iwi settlements.

This SWIM research strategy updates and provides information on how SWIM will proactively give effect to the boarder regional council strategy entitled **Research for the Environment: 2011 Review: Regional Council Research, Science and Technology Strategy**. It also provides information on the future direction of the SWIM group.

This project was funded by Enviro Link and completed by Karen S Bell of Enviro Solutions for Landcare Research. This work has been peer reviewed by Andrew Fenemor (Landcare Research) and the following SWIM committee members: Graham Sevicke-Jones (Convenor), Mary-Anne Baker, Lian Potter, Lawrence Keys, Carl Howarth and Martin Neale. SWIM members have also had opportunities to comment on the work as it progressed.

The Terms of Reference for SWIM provide some useful contextual information about the group.

The **purpose** of the SWIM Group is:

*To enhance the management of freshwater resources in New Zealand by working in collaboration on:*

- *freshwater issues, including sharing scientific, policy and technical information, and*
- *science and policy initiatives, within the government sector and other agencies as appropriate.*

The SWIM **objectives** outlined in the terms of reference are that the SWIM group will:

- *Facilitate and corroborate inter-regional and inter-agency (central government and research organisations) communication and exchange of freshwater scientific, technical and policy information.*
- *Support and encourage the development of tools, methodologies, guidelines and codes of practice relevant to Councils' role in the management of surface water allocation, quality, ecology and resource use in conjunction with the other SIGs as appropriate.*
- *Promote the transfer and uptake of knowledge created from research, investigations and other products of SWIM and its agents.*
- *Prepare collective recommendations to the regional councils' Resource Managers Group, that reflect the collective agreement of regional council scientific and policy officers on significant surface water management issues.*

## **SWIM Mission**

SWIM's research strategy mission is:

To promote an integrated approach to water management in New Zealand by sharing information and skills and influencing science and policy.

This includes integrating:

- within the SWIM group (i.e. regional council integration),
- with other Special Interest Groups,
- with other tiers of council management such as the Resource Managers Group, Regional Council Chief Executives,
- land, landscape, freshwater, groundwater, coastal environments and research, monitoring and reporting,
- the efforts of different management agencies, including central government, research organisations and the primary sector,
- between science and policy,
- between ecological, economic, social and cultural drivers, and recognising mātauranga Māori.

## **SWIM Research Strategy Principles**

The following guiding principles outline the way SWIM will operate as a SIG. SWIM will:

- work collaboratively with all members and in particular with other member councils,
- work collaboratively with others and in particular with central government, research providers, and the primary sector,
- where feasible, recognise mātauranga Māori, and
- ensure communication is proactive and future looking.

To empower SWIM with the strategic direction required to enable effective and relevant freshwater research and influence, a SWIM vision has been developed, along with a number of strategic goals and objectives which will enable this vision to be realised.

## **Our SWIM Vision**

**SWIM will enhance and support the management of freshwater resources in New Zealand contributing to and guiding the development of robust, integrated, relevant and trusted information and research to contribute to policy development and decision making.**

## **Our SWIM Goals**

### **Goal 1: SWIM has clear science and research priorities**

To identify, prioritise and regularly review research needs for freshwater in New Zealand in a timely manner.

### **Goal 2: SWIM guides robust, relevant and integrated research**

To influence and guide the development of robust, relevant, integrated science for informing freshwater policy and decision making (including research conducted by member councils).

### **Goal 3: SWIM informs and advises in a proactive and audience relevant way**

To input SWIM expertise and research findings when required and in a way that is understood by New Zealand's decision-makers and key sector organisations to improve and support the management of freshwater resources.

### **Goal 4: SWIM is collaborative and engages effectively internally and with others**

To develop effective engagement processes within, across and between the SWIM group and key sector and external organisations to ensure a collaborative approach towards common goals for the management of freshwater resources.

### **Goal 5: SWIM science recognises mātauranga Māori**

To ensure that SWIM research projects recognise mātauranga Māori, where appropriate, to enhance our understanding of our freshwater resources and provide relevance to tangata whenua.

# 1. Goal one

## SWIM has clear science and research priorities

### Objectives for achieving goal 1

- 1.1 Regional councils and unitary authorities from SWIM to actively participate in a prioritisation process for future freshwater research needs.
- 1.2 Identify freshwater science gaps at different scales.
- 1.3 Explore potential risks to the quality and quantity of New Zealand freshwater bodies and freshwater ecosystems.
- 1.4 Maintain a list of priorities for SWIM research and review this at least on a five yearly basis.
- 1.5 Communicate with the Special Interest Groups about these research priorities (objective 1.4) and invite their participation in the process.
- 1.6 Seek Resource Managers Group (RMG) endorsement of the research priorities.

## 2. Goal two

# SWIM guides robust, relevant and integrated science and research

### Objectives for achieving goal 2

- 2.1 To guide robust science and research, good practice protocols will be developed and used where possible (including quality assurance).
- 2.2 Data management and accessibility to be addressed as part of all research.
- 2.3 Inter and multi-disciplinary applied research to be promoted to progress understanding.
- 2.4 To ensure that research is relevant, research that informs policy and decision making will be promoted.
- 2.5 To promote integration of all water quality and quantity disciplines and integration between freshwater management and other related resource management such as coastal, land use, landscape, waste, biodiversity and hazards management.
- 2.6 Ensure an integrated approach with all science and research efforts, including with the other Special Interest Groups.
- 2.7 Collate all science and research conducted annually and place a list of this research on the SWIM website.

### 3. Goal three

## SWIM informs and advises in a proactive and audience relevant way

### Objectives for achieving goal 3

3.1 Encourage better understanding of how to manage freshwater resources.

3.2 Develop a communications plan for SWIM to ensure the group is collaborative, proactive, responsive and future looking. The content to include:

- Better internal communications (improve the website, emails)
- Identification of key audiences and their information needs
- Current information, targets and gaps from all councils
- Identification of key communications mechanisms and channels.

3.3 Designate a SWIM communications person on the SWIM committee to prepare the communications plan and for marketing SWIM.

3.4 Communicate science in a proactive and audience relevant way to enable uptake by a range of end-users and the sector.

3.5 Identify opportunities to influence and advise on freshwater management for example scientists working with policy makers in two way communications to ensure uptake of recent science and research.

3.6 Ensure that key science research is communicated towards the needs of the users, by identifying key gaps, issues and concerns.

3.7 Communicate to research providers about science and research needs.

3.8 Define SWIM member's skills and have a list of these available on the SWIM website and a list of key reference documents and research that is updated annually and placed on the SWIM website.



## 4. Goal four

# SWIM is collaborative and engages effectively internally and with others

### Objectives for achieving goal 4

- 4.1 To work with a spirit of collaboration on the management of freshwater and related research to achieve common goals and integration (note links with objective 2.5).
- 4.2 To develop and maintain an **effective internal engagement process** for SWIM to explain what collaboration means (note links to objective 3.2). This could build on the SWIM Communications Plan or be a specific process for engagement and collaboration.
- 4.3 Internal benefits to SWIM members will include:
- Mentoring of new and less experienced practitioners
  - Up-skilling of members through the information exchange, such as the regional roundup done 6 monthly, by sharing information on the website, and from presentations and workshops
  - Professional networking opportunities
- 4.4 Work within SWIM is integrated where feasible and for the benefit of its members, but not always of benefit to every council.
- 4.5 Develop and maintain an **effective external engagement process** for SWIM to explain what collaboration means (note links to objective 3.2). This could build on the SWIM Communications Plan or be a specific process for external engagement and collaboration.
- 4.6 To identify the groups and people that SWIM will collaborate and engage with, including but not limited to CRIs, other research providers, MfE, MPI, DOC, MOH, Stats NZ, MBIE, PCE, the primary sector, business groups and Māori.

## 5. Goal five

### SWIM recognises mātauranga Māori

#### Objectives for achieving goal 5

- 5.1 Recognise and act on opportunities for including Māori perspectives in science, knowledge, research and policy.
- 5.2 Support freshwater research projects that include cultural values and Māori involvement in monitoring where feasible.
- 5.3 Have one member of the SWIM committee with the responsibility of considering further how SWIM science and research can be better informed by mātauranga Māori, including any key mechanisms for encouraging Māori practitioners in SWIM's work.

## Implementation, monitoring and review of the strategy

Implementation of the strategy will be achieved through the realisation of the strategy objectives. An implementation plan (including actions, responsibilities and timelines) will be developed by the convenor of SWIM to detail how these objectives will be achieved.

The strategy also recognises that objectives will need to develop and evolve over time to remain relevant to the changing policy and science landscape of New Zealand. Regular monitoring of the strategy and developing a detailed implementation plan will therefore be important in ensuring that SWIM is on track to meet these goals and objectives, and to identify future trends and research needs. As a guide it is proposed that monitoring and review will be undertaken at three levels as outlined in the table below.

Type	Time period
Review of progress on implementation of actions in the implementation plan	Annually
Review of progress against strategy objectives	2-yearly
Review of strategy as a whole	5-yearly

## The research prioritisation process to date

As part of the process for developing this research strategy, councils were asked to identify:

- current science and research,
- gaps in knowledge and understanding and
- research priorities.

This information is available in table format in a spreadsheet from the Māori SWIM convenor. The 19 research priorities that were identified were then presented to the SWIM meeting in May 2014 and further refined into the following list of top research priorities (in order of priority as defined by SWIM):

1. National surface water protocols, such as NEMAR, to provide consistency for national reporting.
2. Guidance on in-stream riparian approaches for potentially conflicting values.
3. Surface and groundwater interactions and modelling.
4. The ability to provide consistent and representative data for national reporting.
5. = The interface between land and water management.
  - = Guidelines on catchment land use modelling approaches.
  - = Environmental drivers behind benthic cyanobacteria blooms.
  - = Cumulative contamination limits in waterways and how these relate to land use and soil types in a catchment.

These priorities will undergo further development as identified in the objectives 1.1-1.4 of this strategy.