

SURFACE WATER INTEGRATED MANAGEMENT

Beyond 2020: Strategy of the SWIM SIG

TE RŌPŪ TIAKI I TE KAHU O TE WAI

Ki tua i te tau 2020: Te Rautaki a te SIG SWIM

VISION TE WHAKAKITENGA

TRANSFORMING FRESHWATER MANAGEMENT THROUGH COLLABORATION AND PARTNERSHIPS

The Surface Water Integrated Management group (SWIM) is at the cutting edge of freshwater science for freshwater management, providing the interface for collaboration and information exchange between regional council scientists, practitioners, research providers, policy, and decision makers.

Statement of intent, revised SWIM terms of reference 2020.

FOREWORD KUPU WHAKATAKI

Freshwater management has never been such a high-profile item on the public and political agenda. New Zealanders have the aspiration that most waterways are swimmable, and since 2011 central government has actively progressed changes in policy and legislation to improve management of our freshwater resources. Finding an approach to improve and sustain our freshwater resources is a complex ambition for society to meet alongside other environmental and socio-economic goals. Aotearoa New Zealand's regional government sector is charged with the integrated management of the natural and physical resources of a region and has a major role to play in this.

The Special Interest Group (SIG) network was developed to coordinate the response to diverse environmental management concerns shared across the regional government sector. The SWIM (Surface Water Integrated Management) SIG has the specific responsibility to progress freshwater related challenges. Since its creation SWIM has, along with other SIGs, adapted to a continuously changing landscape in terms of political direction and community aspirations. The group is home to highly enthusiastic and skilled freshwater experts specialised in disciplines ranging from freshwater ecology to water quality and water quantity. Members can network, and exchange and share expertise with professionals from other regional councils and unitary authorities. It is a place where members can also voice opinions and provide suggestions to assist with achieving aspirational objectives set out in SWIM's strategy.

This report represents one of the most comprehensive strategy reviews SWIM has initiated. Since its last iteration in 2014, demand and expectations from the public and central government around freshwater management has

grown continuously, making the landscape in which the group operates even more demanding. The strategy review panel included representatives of each regional council and unitary authority. It was guided by the wisdom of two facilitators working closely with the SWIM Steering Group. Five online workshops were held during New Zealand's COVID-19 pandemic lockdown between 5 May and 2 June 2020, making this strategy review process atypical. It has led us to be aspirational, though realistic, and front up to the big task our members are taking on, acknowledging the 'big mission' to complete. The review panel identified the need to reconsider SWIM's organisation, structures, and procedures. By implementing this strategy, SWIM aims to be a more effective, inclusive SIG group that will create tangible benefits for regional councils and unitary authorities struggling with resourcing freshwater management demands independently of one another. The goals of the strategy are; to enable SWIM members to further develop their connection with key stakeholders within and outside the Regional Sector SIG network, increase their degree of involvement and influence at central and local government level, achieve aspirational outcomes, and transform national freshwater management through collaboration and partnerships.

It is with pride that I am releasing this document and together with our group of dedicated experts look forward to embarking on a journey to consolidate our core strengths, identify areas to strengthen and develop, and opportunities to advance.

Jean-Charles Perquin

Surface Water Integrated Management Special Interest Group Convenor

GLOSSARY HE PAPAKUPU WHĀITI

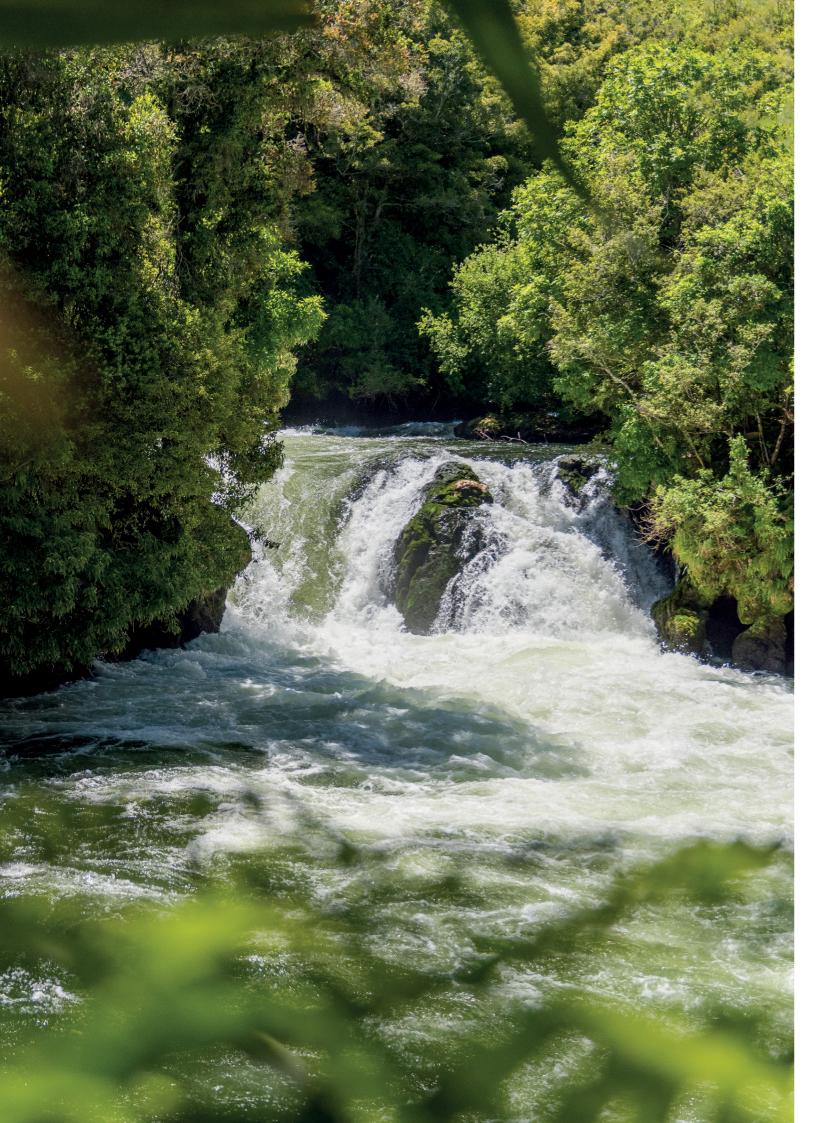
AC	Auckland Council	NRC	Northland Regional Council
BOPRC	Bay of Plenty Regional Council	MDC	Marlborough District Council
CRI	Crown Research Institute	MfE	Ministry for Environment
DOC	Department of Conservation	NCC	Nelson City Council
ECanRC	Canterbury Regional council	ORC	Otago Regional Council
EMAR	Environmental Monitoring and Reporting	RCEO	Regional Chief Executive Officers
ESRC	Environment Southland Regional Council	RS-RST	Regional Sector-research,
GDC	Gisborne District Council	strategy	science, and technology strategy
GWRC	Greater Wellington Regional Council	RMG SIG	Resource Managers Group
HBRC	Hawkes Bay Regional Council		Special Interest Group
HRC	Horizons Regional Council	SWIM	Surface Water Integrated Management (the group)
ICM	Integrated Catchment Management	TDC	Tasman District Council
LAWA	Land Air Water Aotearoa	TRC	Taranaki Regional Council
NEMS	National Environmental Monitoring Standards	WCRC	West Coast Regional Council
NPS-FM	National Policy Statement for Freshwater Management	WRC	Waikato Regional Council

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ABOUT SWIM MO SWIM

The Surface Water Integrated Management Regional Sector Special Interest Group (SWIM SIG) is the home of surface freshwater management expertise for local government across Aotearoa New Zealand. There is a large network of SIGs and they are an important component of local government, enabling members across organisational and catchment boundaries to cooperate on joint concerns and share information on complex technical and management issues that affect all agencies. Increasingly they provide a communication channel between regional and national levels helping to influence workable policy directions and shape science and research directions.

SWIM is one of the largest SIGs with 112 members at the time of publication. It was established to enhance capacity across regional agencies to address growing freshwater management challenges through sharing scientific policy and technical information, and cooperating on science and policy initiatives. SWIM sits alongside other SIGs under the overview of the Resource Managers Group (RMG), while the entire SIG network is overseen by the Regional Chief Executive Officers (RCEO).

SWIM membership is open to regional and unitary council staff involved in surface water quantity, quality, ecology, resource management and related scientific issues. Representatives of central government agencies, (namely the Ministry for the Environment (MfE)), the Department of Conservation (DOC)), and the RMG. Members work as specialists or across multiple functions reflecting the diversity of arrangements, challenges, and capacity in each of the regions. The three most common areas of activity for members are: State of the Environment (SOE) monitoring and reporting, providing technical advice in surface freshwater science domains, and integrating management science with planning and policy.

SWIM, one of the oldest SIGs, is the product of a merger in 2005 of two groups that had been in existence since 1997–SWIG and SWAG (surface water information group and the surface water allocation group). This reflects the longstanding management challenges for surface water that are a core concern for communities across the country. The year 2011 brought the first release of the National Policy Statement for Freshwater Management (NPS-FM) which has further increased demand for freshwater science and policy integration to deliver on issues of national significance for the sustainable management of freshwater.

Regional Sector Special Interest Group (SIG) Network Structure Chart

(as at 7 July 2020. Contact: natasha.muir@horizons.govt.nz)

Figure 1: Regional Sector Special Interest Group (SIG) Network Structure Chart

(available on Regional Sector Information Portal)

RCEO Group SIG Network Virtual Team Michael McCartney, HRC **Navigation & Safety Corporate & Finance Bio-Managers** Jim Lyle, NRC Mike Nield, TRC Jonathan Streat, ESRC Richard Barnett, WRC Malcolm Nicolson, NRC Rob Phillips, ESRC Sarah Gardner, ORC [Vacant] Tony Phipps, NRC **HR/Health & Safety** Ngā Kairapu (Māori SIG) **Biosecurity** Kataraina O'Brien, BOPRC Colin Morris, HRC Greg Corbett, BOPRC Kane McElrea, NRC David Perenara-O'Connell, ECanRC Vaughan Payne, WRC Michael McCartney, HRC Communications Info Technology **Biodiversity** Jane Carroll, ESRC Patrick Whaley, WRC Christine Morrison, HRC Jane McLeod, NCC [Vacant] Sarah Gardner, ORC **CDEM** Ian Macdonald, HB CDEM Group Mike Meehan WCRC Mark Wheeler, MDC Key **Lead SIGs reorting Hazard Risk Management** Iain Dawe, GWRC to RCEO Group SIG Convenor RCEO Sponsor

River Managers

Greame Campbell, GWRC Mike Meehan, WCRC

Resource Managers

Clare Barton, NCC James Palmer, HBRC

Transport

Anke Kole, GWRC

Grant Fletcher, GWRC Greg Campbell, GWRC

Policy Managers

Gavin Ide, HBRC Pere Hawes, MDC

Science Advisory

Iain Maxwell, HBRC

Consent Managers

Philip Burge, ECanRC Colin Dall, NRC

Contaminated Land & Waste

Victoria McKay, TRC Fred McLay, TRC

Nat Air Quality

Owen West, ESRC Liz Lambert, HBRC

Environmental Data

Mike Ede, MDC Ged Shirley, HRC

Land Monitoring

Haydon Jones, WRC Mike Scarsbrook, WRC

Ground Water

Rebecca Morris, GWRC Nic Peet, HRC

Land Managers

Grant Cooper, HRC Jon Roygard, HRC

Coastal Management

Oliver Wade, MDC Stacey Faire, BOPRC Dave Allen, AC Vin Smith, ESRC

Jean-Charles Perquin, NRC

Compliance & Enforcement

Alex Miller, BOPRC Chris McLay, WRC

Surf Water Int Mngmnt

Nic Peet, HRC

Stand-alone SIGs reporting to RCEO Group

SIG Convenor **RCEO Sponsor** RCEO Alternate Sponsor Second Tier Support

Sub-SIGs reporting to RMG/Lead SIGs/ **Stand-alone SIGs**

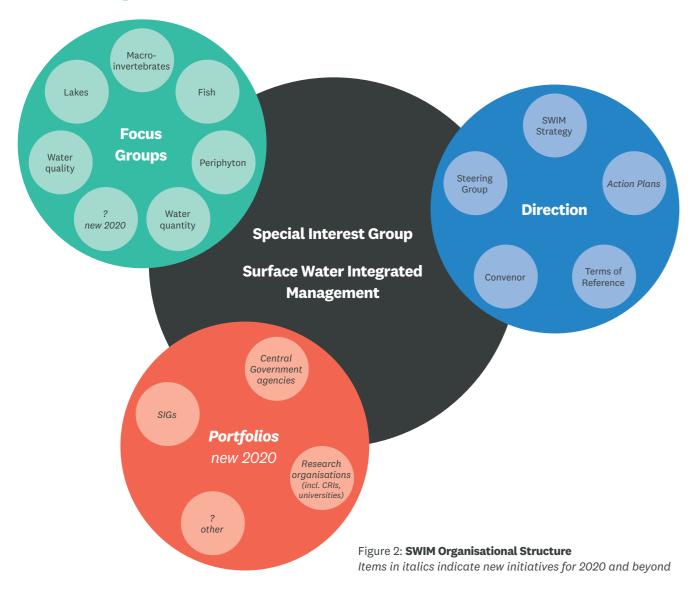
SIG Convenor RMG Link

HOW DOES SWIM WORK? HE PĒHEA TE MAHI A SWIM?

SWIM works to connect its members and enable them to share resources, develop joint initiatives and deliberate on important issues through face to face and online meetings, Focus Groups, email and the use of the SWIM portal. The group also acts as a platform enabling members to have a voice at national level on policy and directives and contribute

to science and research priorities. Connecting members within SWIM and liaising with external partners (e.g. SIGs, Crown research institutes (CRIs), MfE) is a priority outcome for SWIM and this is further explained in this strategy (section 5).

SWIM Organisational Structure



The work of SWIM is coordinated by a Convenor supported by a Steering Group of eight members (Figure 2).

SWIM traditionally meets collectively at least twice a year and engages in a wide range of smaller meetings and communications. Future SWIM interactions will include more subject specific meetings, greater internal communication and collaboration, and online sessions (see section 5). SWIM also supports projects funded jointly by councils and/or through grants such as Envirolink (with the endorsement of RMG).

SWIM hosts several Focus Groups which are designed to be flexible, respond to arising demands and provide expertise on persistent and/or emerging issues relevant to the sector

and central government (Table 1). One improvement being made for these groups is to regularly communicate their progress and outcomes to the wider SWIM membership by way of the SWIM newsletter (see section 5).

SWIM aims to develop new and maintain existing connections with key SIGs (membership is often shared across groups). Key SIGs include: Environmental Data, Coastal Management, Land Monitoring, Biodiversity, Ngā Kairapu, Groundwater, Policy Managers, as well as the River Managers group. Another improvement being made is for SWIM to have several Portfolios where nominated members will liaise with key SIGS on cross SIG themes central to SWIM outcomes and provide updates through the SWIM newsletter (see section 5).

HOW CAN MEMBERS GET INVOLVED? KA PĒHEA NGĀ MEMA E WHAI WĀHI AI?

With such a diverse membership SWIM has opportunities to utilise its collective strengths, talents, and expertise in areas that will bring about the greatest value to members and SWIM outcomes. There are many ways members are, or can be involved in SWIM activities and initiatives:

- Using the the Regional Sector Information Portal (RSIP) to share expertise, ideas, questions, projects or reports, and collaborate with other members.
- → Volunteering to be an active member of Focus Groups or take on a Portfolio for SWIM.
- → Send ideas/queries/questions through to the Convenor and/or Steering Group members for hui topics.
- → Liaising with other SWIM members within their organisation and being an organisational representative at SWIM 'caucus' to respond to national issues.

- → Circulating SWIM information around their own organisation and advocating senior management for supporting staff capacity involvement in SWIM.
- → Volunteering to be part of SWIM initiatives or projects as the opportunities arise.
- \rightarrow Becoming a mentor for new SWIM members.
- → Taking part in face to face or online hui.

SWIM will also hold bi-annual "planning and review" meetings. These are short targeted meetings designed to keep the agenda of activities current and ensure these continue to progress the strategic outcomes (see section 6 on strategy implementation). These meetings may happen online or take place during other face to face meetings. While these meetings will be relatively small (around 15 people), SWIM will actively recruit participation from a variety of members across the group.

SWIM Organisation

(as of 2020)

Convenor 2019-current

Jean-Charles Perquin (NRC)

Steering group

Time period TBD

Graeme Clarke (ECanRC), Rochelle Carter (BOPRC), Lucy Baker (GWRC), Elaine Moriarty (ESRC), Stefan Beaumont (NCC), Bevan Jenkins (WRC), Coral Grant (AC).

Focus Groups

2019-current

Lakes In response to Environmental Monitoring and Reporting

Lead: Deniz Ozkundakci (WRC) (EMaR) and Land and Water Aotearoa (LAWA), NPS-FM

Macroinvertebrates

In response to EMaR, LAWA and National Environmental

Monitoring Standards (NEMS), NPS-FM

Water Quantity

Lead: Stefan Beaumont (NCC)

Lead: Michael Pingram (WRC)

In response to EMaR, LAWA and NEMS, NPS-FM

In response to EMaR/LAWA, NPS-FM Lead: Paul Fisher (NCC)

Periphyton In response to NEMS

Lead: Shirley Hayward (ECanRC)

Water Quality In response to EMaR/LAWA

Lead: Tim Davie (ECanRC)

New 2020 beyond

Focus Groups

SWIM will initiate groups to work on specific issues relevant to the sector and respond to tasks assigned by RCEO and/or RMG, or as deemed relevant by SWIM members.

Portfolios

Two SWIM members will be appointed as leads, and others as interested will set short-medium term objectives to pursue topical issues that address important outcome areas for SWIM.

Table 1: **SWIM organisation** (as of 2020)

SURFACE WATER MANAGEMENT: **GOING BEYOND 2020 TE TIAKI I TE** KAHU O NGA WAI: KI TUA O 2020

THE CHANGING CONTEXT FOR FRESHWATER MANAGEMENT TE PANONI HAERE O TE HOROPAKI O TE TIAKI WAI MĀORI

The desire of many New Zealanders to see an improvement in freshwater quality and the natural environment is reflected in current central government direction with its strong focus on freshwater resource management. Recently, National Policy Statements from central government provided clearer direction to enable local government decision-making about sustainable freshwater management under the Resource Management Act 1991 (RMA). NPS-FM requirements are a compelling driver for SWIM as a support network and an information sharing platform, as communities need information to help set resource limits by 2025 and track progress. However, what SWIM members also juggle are the competing needs of national, regional, and catchment-level monitoring (PCE, 2019) and the desire for information on state and trends at different geographic scales. Moreover, the requirement in the NPS-FM to recognise Te Mana o te Wai also strengthens what has long been recognised as a need for truly integrated catchment management and consequently an integrated evidence base. Whilst we may take a catchment focus, recognising the environment as a connected system is critical to our advice.

Collectively this makes for a challenging environment going forward in 2020, putting further pressure on often stretched regional councils' freshwater management staff capacity. SWIM can play a pivotal role by defining clear objectives with associated lines of actions supporting the sector in freshwater management. There are also emerging opportunities to work in new ways with other stakeholders and sectors to enhance our own regional sector monitoring

networks. Working alongside and sharing information with kaitiaki and citizen science groups is an obvious way of both enhancing our collective knowledge on freshwater systems and building trust in the information and advice we provide.

Integrated catchment management requires a much more transparent link between water body outcomes and an understanding of changes occurring in catchments, the latter being better described through more reliable/frequent finer scale analysis. Weaving mātauranga Māori into decisionmaking represents a real opportunity to enrich our evidence base if we make this an area of focus.

Monitoring and analysing information is only the first step, and for this to have impact it needs to be communicated to the right decision-makers at the right time and in the right way. The challenge for regional councils is to have capability not only in technical science disciplines but in communicating and understanding the needs of a range of end users, from practitioners of policy, planning and implementation, to politicians and communities. This is no small feat as demand for this information continues to increase rapidly, and there are different and sometimes competing values that stakeholders have in relation to water and natural resources in general. Communicating uncertainty and complexity to an audience that is seeking definitive answers is a real talent and one that will be in increasing demand as we seek to explain the interactions of climate change, cumulative effects, and historic and current management practices on our environment.

WHAT CAN SWIM BRING TO THIS CHALLENGING ENVIRONMENT? HE AHA TĀ SWIM MŌ TĒNEI TAIAO PAPATOIAKE?

The strategy meetings revealed a great deal of enthusiasm for SWIM. SWIM members see value for what SWIM currently does and have hopes for how it could do more. A core strength of SWIM is that it creates collegiality for members across different organisations—a 'safe' place to share

ideas, ask questions and collaborate on projects. While SWIM provides a good basis for helping the sector focus on important issues and identify opportunities for joint effort, members want this to develop further, particularly strengthening relationships with other SIGs (Figure 3).

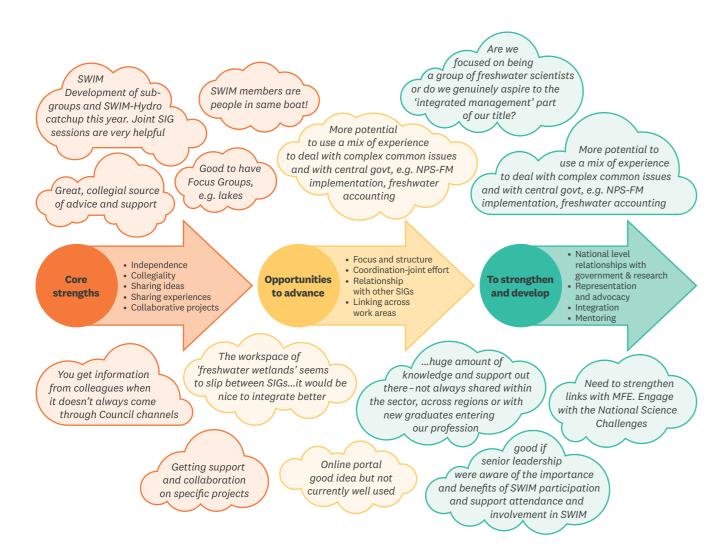


Figure 3: SWIM strategy discussions revealed core strengths, opportunities to advance and areas to strengthen and develop

A growing national effort in the freshwater space has meant that relationships between local and central government have become more important and SWIM is an obvious conduit for this interaction. SWIM members would like to see greater recognition of SWIM by national agencies and better opportunities to have 'upstream' involvement in policy development. Similarly, SWIM members would like their own organisational leadership to be aware of the importance and benefits of SWIM participation, and support attendance and involvement in SWIM and its activities.

SWIM has a large membership with a range of individual and organisational priorities, with this comes the challenge of ensuring everyone has good opportunities and incentives

to engage. The group also has an important role to play supporting those new to the profession, helping them benefit from the wealth of knowledge and experience available, and develop contacts across the Regional Sector network.

Changing ideas and pressures on surface freshwater management also raised fundamental questions about SWIM's role as an "integrator" – what does this mean for what SWIM does and how it does it? As an organisation SWIM must balance demands and choices for allocating time and effort that will always be less than the enthusiasm and commitment of its members would hope it could be! (Figure 4)

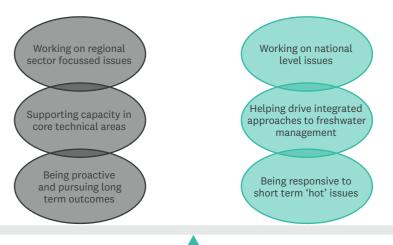


Figure 4: SWIM balances different demands for allocating time and effort

This includes:

- → Balancing work on national level surface water issues with meeting regional sector-based needs (outward versus inward focus of effort).
- Supporting capacity of core freshwater technical expertise as well as helping to drive integrative approaches to water management through connections across disciplines and across other SIG areas.
- Being proactive and pursuing long-term aims for improving surface water management outcomes, versus being responsive to immediate needs and demands.

Also, as a member of a wider Regional Sector SIG network, SWIM must be alert to the signals of the Regional Sector's overall priorities and the recently released Regional Sector Research Science and Technology (RS-RST) strategy.

In the online workshop discussions several significant and recurring questions arose and this strategy (2020-2025) represents the strategic choices made in response to these.

- → What is our primary focus?
- Who are our most important collaborators and relationships?
- → How do we ensure that mātauranga Māori and climate change are key considerations in our decision-making?
- → What does integration mean for us?
- → How do we make decisions and identify priorities?

This strategy has brought together ideas and current thinking on all of these, creating intention and direction for SWIM over the next five years, as well as providing a basis of ongoing discussion.

THE SCOPE OF SWIM 2020: WHAT IS OUR PRIMARY FOCUS? TE WAHI MO SWIM 2020: HE AHA TE ARONGA MATUA?

The SWIM strategy process involved discussions that refined and clarified the different areas that SWIM should operate in over the next five years given the current and trending challenges for SWIM members. The discussions often centred on "what is our primary focus?" – reflecting the balancing act for SWIM (Figure 4).

Figure 5 outlines the roles, functions, and areas of importance for SWIM. SWIM operates at two levels:

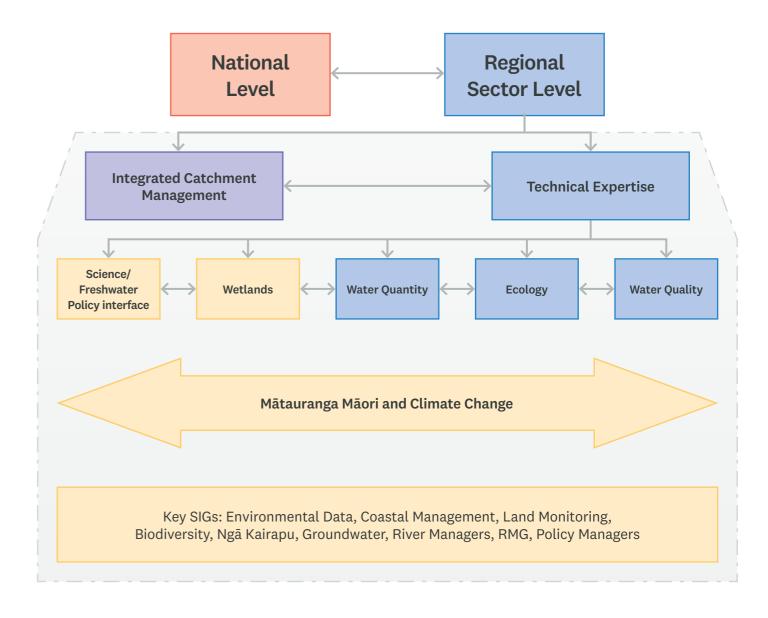
- National level (providing input, advice, and response largely to policy but also to national science and research), and the
- Regional sector level where we are collaborating, sharing ideas and advancing our respective disciplines.

The blue boxes (Technical expertise) represent areas where SWIM members are subject matter experts and for many members this feels like their most natural 'home'. Also, under technical expertise there are two yellow boxes where SWIM technical expertise is important but where SWIM cannot make progress alone. These are (1) Wetlands—where SWIM contributes to the water quality management element of these ecosystems but needs to work with others (e.g. the Biodiversity SIG) to address wetland biodiversity outcomes; and (2) Science/Freshwater Policy interface—which

acknowledges the interaction between Science/Freshwater Policy is at the core of freshwater management. SWIM members play an important role in sense checking the operational resource management applicability of the science that supports the policy direction, and SWIM needs to work closely with our policy colleagues and the Policy Managers SIG to enhance capacity in this interface.

Integrated catchment management has been separated out because while it is an important space for SWIM, it is not something SWIM as practitioners or as a SIG can do alone. We need to work closely with our Groundwater, Coastal, Biodiversity, Policy and Land Management and Ngā Kairapu colleagues/SIGs to achieve holistic integrated 'mountains to sea' catchment management.

Mātauranga Māori crosses all areas of SWIM and members desired strengthening relationships with Ngā Kairapu to support our endeavours to honour, respect and protect the mana of mātauranga Māori that is shared with us and recognise this valuable knowledge alongside other scientific knowledge. Similarly, climate change, adaptation and mitigation is a priority area acknowledged at the Regional Sector level. Giving appropriate mana to mātauranga Māori and responding to climate change are important matters for SWIM professionals that cross multiple areas of activity at both regional and national level.



Key Roles

Independent advice and response to policy and national science and research

Boxes = 'What' we do **Arrows** = 'How' we do it, opportunities for change and strength for SWIM.

Collaboration, connection, sharing information, research and advancement Implementation, upskilling or collaboration with other SIGs Progressive thinking and action by partnering with others

Figure 5: Scope of SWIM

Most time spent in blue and yellow boxes. Time allocation based on outcomes in strategy.

WORKING TOWARD CLEAR OUTCOMES TE MAHI NGATAHI KIA TUTUKI NGA WHAKAPUTANGA

The strategy identifies ten outcomes with associated objectives for directing action across all areas of SWIM scope (see full tables 2-4). While the outcomes themselves will require the work of many players, often beyond the membership of SWIM, they provide focus for specific objectives that SWIM itself can achieve The outcomes are grouped into three major areas that collectively provide a

map for how SWIM can work towards its ambitions to provide a vital network and home for collaboration, and partnership to transform freshwater management in Aotearoa. These are: Freshwater science and technical capacity, Freshwater management new capability, and a stronger more connected SWIM.

Freshwater science and technical capacity

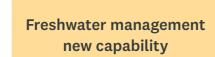
Creating consistency and efficiency, for regional councils and influencing national directions

[outcomes 1–3]

Stronger more connected SWIM

Developing a vital network, with opportunities for member involvement and leadership

[outcomes 7–10]



Building capability in climate change, mātauranga Māori, and integrated catchment management

[outcomes 4-6]

+

Transforming freshwater management through collaboration and partnerships

Figure 6: **How the major outcome areas link SWIM to its overall vision**

Freshwater science and technical capacity [Outcomes 1-3]

These outcomes focus on core freshwater technical concerns at both a regional and national level. These are established areas of SWIM operation and the objectives for SWIM over the next five years are: to improve knowledge sharing; promote consistency, efficiency, and effectiveness; and improve understanding of freshwater technical issues at regional and national level. SWIM also recognises the importance of strengthening relationships, particularly with other SIGs, to make progress in areas where an intersection of different expertise is needed (e.g. wetlands and freshwater policy).

Outcome 1: Enhanced capacity in regional freshwater management science.

Outcome 2: Good regional and national links for informed policy development and implementation.

Outcome 3: Enhanced collaboration across freshwater domains.

Freshwater management new capability

[Outcomes 4-6]

Integrated catchment management, climate change, and mātauranga Māori all represent critical but complex areas for SWIM that will become increasingly important in the future. The focus of outcomes and objectives in this space is to build understanding and capacity for SWIM members and develop the relationships to progress these.

Outcome 4: Greater capacity and understanding in matauranga Maori.

Outcome 5: Greater capacity and understanding in climate change.

Outcome 6: Greater capacity and understanding in integrated catchment management.

A stronger more connected SWIM

[Outcomes 7-10]

These outcomes cover the work needed to be done to ensure SWIM is a vital and effective network. A recognised strength of SWIM is its ability to connect people, and over the next five years SWIM will build on this, giving SWIM members opportunities to engage, learn from one another, and provide collective leadership.

Outcome 7: SWIM has strengthened collaboration and communication.

Outcome 8: SWIM expertise is known and promoted.

Outcome 9: Advanced freshwater science and management through innovative practical research.

Outcome 10: SWIM supports member development and capacity.

LINKS TO OTHER STRATEGIC DOCUMENTS NGĀ HONONGA KI ĒTAHI ATU TUHINGA RAUTAKI

The above outcomes and objectives frequently link well with those in the Regional Sector business plan (2020 draft) which includes freshwater management as a "big ticket" item as well as monitoring information and reporting data

and sector capacity and capability. It also links with strategic priorities defined in the Regional Sector Research, Science and Technology (RS RST) strategy (2020). Specifically:

SWIM outcome 1	RS-RST strategy priority 9; Cross-cutting themes. Improving Data Management.
SWIM outcome 2	RS-RST strategy priority 1; Influencing government science direction & 3 Better science utilisation.
SWIM outcome 3	RS-RST strategy priority 4; Enhancing policy effectiveness & 5 Integrated land and water science for enhanced sustainable production.
SWIM outcome 4	RS-RST strategy priority 2; Incorporation of mātauranga Māori.
SWIM outcome 5	RS-RST strategy priority 1; Cross-cutting themes: Adaptation and Mitigation of Climate Change.
SWIM outcome 9	RS-RST strategy priority 1; Influencing government science direction & 10 Retaining and building science capability and capacity.
SWIM outcome 10	RS-RST strategy priority 10: Retaining and building science capability and capacity.

Table 2: Freshwater management technical outcomes

Overall outcome	SWIM objectives
(1) Enhanced capacity in regional freshwater management science.	(1a) SWIM acts to support regional consistency and develop capacity in NPS-FM implementation.
A shared understanding in areas of freshwater quality, quantity, and ecology at regional and national levels is underpinned by robust technical expertise.	(1b) SWIM promotes and supports the development of consistent and integrated national monitoring networks and reporting approaches.
	(1c) SWIM works with MfE, Policy Managers SIG and other relevant SIGs to produce and promote a consistent and equitable approach to freshwater accounting that allows for differences in resourcing, and a tiered approach across different councils.
	(1d) SWIM actively supports collaboration across councils to promote consistency and efficiency in a range of technical areas including data standards, taxonomy, indicators, and trend analysis.
(2) Good links between regional and national levels for freshwater management. Central government policy and advice is well informed by regional level needs, aspirations, and constraints.	(2a) SWIM provides timely and coordinated responses to central government requests and needs.
	(2b) SWIM promotes greater inclusion of SWIM in post and pre-development discussions leading to national level policy, frameworks, and national level guidance.
	(2c) National agencies & research groups recognise SWIM as the key liaison group for surface water management through active promotion of SWIM expertise, skills, and achievements.
	(2d) SWIM promotes good integrated national policy by collaborating with other SIGs to provide advice to MfE.
(3) Enhanced collaboration across freshwater domains. There are good, active linkages between all freshwater domains (including streams, lakes, and wetlands) for cooperation on technical and policy related freshwater management issues.	(3a) SWIM actively promotes clarity on shared outcomes and areas for collaboration with other SIGs.
	(3b) SWIM members have good skills/capacity in bringing their technical knowledge into regional policy development and implementation.

Table 3: Freshwater management new capability

Overall outcome	SWIM objectives
(4) Greater capacity and understanding in Mātauranga Māori. The mana of mātauranga Māori is	(4a) SWIM actively supports a culture of awareness and reflection which allows the group to respect and protect the mana of mātauranga Māori in all workstreams.
recognised across all areas of surface freshwater resource management.	(4b) SWIM actively facilitates exchange of knowledge/ideas on mātauranga Māori across councils.
	(4c) SWIM members have skills and understanding about how to recognise the value of mātauranga Māori in their work and can tap into useful expertise when needed.
(5) Greater capacity and understanding in Climate Change. Climate change effects are considered across all areas of surface freshwater resources management.	(5a) SWIM actively supports a culture of awareness and reflection on climate change knowledge, planning and communication needs for freshwater management.
	(5b) SWIM actively supports members to understand and incorporate the effects of climate change in surface freshwater management.
(6) Greater capacity and understanding Integrated Catchment Management (ICM). ICM is understood and practice is supported and developed across councils.	(3a) SWIM partners with others and actively promotes progressive thinking to better understand and implement ICM.

Table 4: A stronger more connected SWIM network

Overall outcome	SWIM objectives
(7) SWIM has strengthened collaboration and communication.	(7a) SWIM has strong relationships with other SIGs and across expertise areas within SWIM with good, clear communications.
	(7b) SWIM members share ideas and seek advice from one another.
	(7c) SWIM provides structures/opportunities for focussed discussion and collaboration on topical and pressing matters.
	(7d) SWIM supports efficiency in policy implementation through regional cooperation and shared ideas.
(8) SWIM expertise is known and promoted. SWIM expertise is known	(8a) SWIM can clearly identify the expertise across its membership and can organise to respond to internal and external demands.
internally and externally.	(8b) SWIM can bring new people and externals up to speed rapidly on exactly what we do and how.
	(8c) Council Senior Leadership recognise and support the value of SWIM and provide budget/resources to enable staff to actively participate in SWIM initiatives.
(9) Advanced freshwater science and management through innovative practical research. Important issues in integrated surface water management are identified and progressed.	(9a) SWIM promotes advancement in science and practice through collaborative projects, and priority research topic lists provided internally and externally.
	(9b) SWIM has good relationships with CRIs, National Science Challenges and can proactively contribute to research.
(10) SWIM supports member development and capacity.	(10a) SWIM has clear opportunities/structures across domains that provide for distributed leadership and focussed participation.
SWIM has good, wide, and active membership; the sector, as a whole, receives the benefit of shared expertise and training.	(10b) SWIM actively supports mentoring for new professionals entering the field and identifies and advocates for sector training needs.



FOR ACHIEVING OUTCOMES NGA TUMAHI HOU A SWIM E HUA AKE AI HE WHAKAPUTANGA

During the SWIM strategy discussions many potential activities and actions were introduced. Three stood out as having the potential to help SWIM address multiple objectives and make a significant step towards delivering on outcomes:

- → New structure opportunity Portfolios
- Having a plan for effective communication and building good relationships
- → A transparent approach to prioritisation

Three subgroups met and worked up more detail on these activities.

PORTFOLIOS NGĀ TARI

The SWIM strategic discussions raised the need to strengthen relationships with other SIGs and with national agencies, as well as improve interaction opportunities across SWIM itself. In 2020 SWIM will establish several Portfolios with one-two SWIM members acting as Portfolio leads. The purpose of these Portfolios is to strengthen connections with relevant SIGs or agencies, enabling SWIM to advance on cross-cutting areas such as Climate Change, Integrated Catchment Management and mātauranga Māori, as well as collaborative spaces such as Science-Policy interface and wetland management.

Portfolio leads will provide an important communication and coordination link between SWIM and others. Portfolio holders will include relevant updates in the quarterly SWIM newsletter and use the Regional Sector Information Portal (RSIP) to collaborate on topical issues. These Portfolios may be short-term and related to a "hot topic" or longer-term structures possibly evolving into Focus Groups as needed to meet SWIMs outcomes.

Suggested Portfolio areas for 2020- 2021

- → National agencies & SWIM
- → SWIM-SIG relationships Coastal SIG/ Groundwater SIG/Policy Managers SIG/ Ngā Kairapu SIG/Environmental Data SIG
- → National Science Challenges/CRIs & SWIM.

Portfolios have an important integrating function for SWIM. Members working in this space will provide SWIM updates and priorities to the relevant SIGs or other external agencies they liaise with, as well as providing feedback to SWIM from each of these groups. The key communication tools for this will be korero and the SWIM newsletter.

RELATIONSHIPS AND COMMUNICATIONS NGĀ HONONGA ME NGĀ WHAKAWHITIWHITINGA KŌRERO

Communication and engagement both internally (e.g. with SWIM membership, Focus Groups and Portfolio holders) and externally (e.g. MfE, DoC, MPI, MBIE, other SIGs and RMG, CRIs/National Science Challenges, Universities) is pivotal to SWIM achieving its outcomes. Traditionally, SWIM has met collectively at least twice per year and engaged in a wide range of smaller meetings and communications. The way SWIM aspires to communicate includes more targeted interactive and online sessions and discussions complementing traditional bi-annual meetings.

Purpose

Frequency

kanohi ki te kanohi The range of communication tools SWIM will use going forward will include:

- → the Regional Sector Information Portal (RSIP)
- → online hui
- → a digital SWIM newsletter
- → korero with other SIGs and stakeholders

Workshop specific issues and priorities, AGM, connect and collaborate

- → Focus Groups and Portfolio holders
- → SWIM kanohi ki te kanohi bi-annual meetings (Figure 7).

Each of these communication avenues has a target audience, purpose and frequency that will support SWIM to achieve its outcomes as shown in Figure 7.

SWIM members Figure 7: Key elements of **SWIM** relationships and Portal ? Collaboration, sharing knowledge communication approach (L) As needed SWIM members, invited SIG, CRI or MfE representitives Online hui Advance science on specific issues, or respond to topical issues As needed SWIM, other SIGs, CRIs, MfE, Councils, DOC SWIM Regularly inform of outcomes and opportunities Newsletter electronic) **(**1) Quarterly SWIM Portfolio holders, other SIGs, MfE Inform of outcomes and opportunities for collaboration Kōrero Quarterly and as needed Audience SWIM and invited guest speakers SWIM

Annually and as needed

The SWIM newsletter will cover progress against SWIM outcomes, priorities for research, updates on topical issues, upcoming projects, and opportunities for collaboration. It will include updates from Focus Groups, and Portfolio holders. Whilst this electronic publication will be circulated within SWIM, it will also be designed to be suitable for distribution outside of SWIM and be an important channel of communication to external stakeholders, e.g. CRIs, other SIGs, DOC, Universities. The effectiveness of this newsletter will be regularly evaluated and refined as needed as part of the bi-annual "plan and review" meetings.

Regional Sector Information Portal will continue to be the basis for internal SWIM discussions as this has proven to be a useful collaborative tool for members.

Our korero will be more focussed and more frequent.

We will make use of online meetings (via Zoom or other platforms) to address or advance specific disciplines or issues (e.g. Focus Groups) or respond to emerging or

topical issues (e.g. Emerging Organic Contaminants, NEMS). Outcomes from ngā hui can be communicated to the wider membership either through the Regional Sector Information Portal (RSIP) or the newsletter.

Our kanohi ki te kanohi hui will be more specific and workshop focussed to allow for robust discussion on larger issues (e.g. National Policy Statements, National Environmental Standards) and SWIM functionality (e.g. AGM, Convenor appointment). Outcomes and priorities from ngā hui can be communicated to the wider membership either through the Regional Sector Information Portal (RSIP) or the SWIM newsletter.

These deliberate shifts in how we communicate are priorities for SWIM over the next 12 months. A detailed communication and engagement approach has already been prepared as part of the SWIM strategy development process, and key elements are outlined in Figure 7.





ESTABLISHING PRINCIPLES AND PROCESS FOR PRIORITISATION TE WHAKARITE MĀTĀPONO, TUKANGA HOKI MŌ TE WHAKAMATAMUATANGA

A high-level strategy can only do so much to direct how time and resources are allocated on a real-time basis. There are always choices to be made. Going forward SWIM will have a clear prioritisation approach that will connect these choices back to the overall outcomes for SWIM and ensure transparency in decisions. Opportunities for SWIM to lead or contribute to technical or policy issues important to the sector fall into three categories: i) planned and proactive, ii) responsive to opportunity, and iii) urgent with a short-time horizon. SWIM wants to improve their capacity to prioritise in all three areas. Five considerations (principles) for prioritisation are:

- 1 Contribution to SWIM strategy outcomes
- 2 Adds value that is of benefit to multiple agencies or a significant part of the sector
- 3 Support and likelihood of successful uptake
- 4 Chance to improve links with stakeholders, particularly other SIGs
- 5 Stimulates significant change through improved links, addressing critical knowledge gaps or developing tools to enable more efficient and effective work.

Planned and proactive Kia rite, kia tākare hoki

Initiatives that are amenable to being planned and proactive include projects that could be submitted for Envirolink funding, work with the RMG and research undertaken through the National Science Challenges. For these situations, the SWIM prioritisation process can be both inclusive (involving

an annual or bi-annual brainstorming, idea sharing by members) and strategic (using oversight of the Steering Group to ensure projects meet the prioritisation principles). A list of projects will be maintained to monitor success and to keep track of the balance of effort against SWIM outcomes.

Responsive to opportunity Kia rata ki te āheinga

Frequently unpredictable opportunities come up that SWIM members would like to act on. These can be in policy implementation and/or technically oriented. Checking these adhere to the principles is important, while also asking "how unique and significant is this opportunity?" Keeping track of these projects will also help SWIM recognise its achievements and monitor how much effort and resource has already been allocated in any given year.

Urgent and short-time horizon Kia whāwhai, kia tere

Situations where SWIM is asked to respond urgently or within a short-time horizon are also common. These are largely calls by external stakeholders regarding contribution to national initiatives and, while they can be an important opportunity to ensure the needs and views of the SWIM members are represented, they can also be difficult to respond to, and potentially distracting. In addition, not all SWIM members are mandated to express the views of their agencies in SWIM

collective representation. To ensure SWIM can make the most of these opportunities SWIM will:

- → maintain a database of member expertise and those willing and able for quick caucus
- build relationships and enhance SWIM profile with national bodies to help create more 'upstream' opportunities to contribute to policy discussions.



CAPACITY BUILDING, MENTORING AND PROFESSIONAL DEVELOPMENT TE WHAKAPIKI KAHA, TE WHAKARURUHAU ME TE WHAKAWHANAKE Ā-NGAIO

The strategy discussions revealed a high level of interest in SWIM supporting the capacity of SWIM members as professionals, and in ensuring that SWIM is aware and can promote the expertise of its memberships. Several ideas were raised that will be actively considered for progressing in the short-term:

- → Member survey-identifying areas of expertise
- $\ \, \rightarrow \ \, \text{Mentoring and professional development through}$

- → Enabling a rotating membership for new and less experienced members to join SWIM subgroups
- → Identifying professional training needs and gaps and partnering with CRIs to offer short courses.
- → Taking advantage of SIG network level initiatives
- → Advocate for capacity building across regional sectors to ensure staff have training in relevant skills e.g. data management platforms that are common to all.



PUTTING THE STRATEGY TO WORK: PLANNING AND REVIEWING TE WHAKATUTUKI I TE RAUTAKI: TE WHAKAMAHERE ME TE AROTAKE

Success for SWIM lies in delivering on intentions, addressing the issues and ambitions of its membership, and remaining inspired and on track with its vision of contributing to the transformation of freshwater management in Aotearoa through collaboration and partnerships.

The SWIM strategy process identified multiple outcomes for 2020 going forward – some of which have clear actions that can be taken and some of which, while equally important, represent new ground – so the pathway is less clear. The strategy process also raised some matters that will continue to be the source of ongoing debate. To be useful, a strategy needs a process for implementation and discussion so that next steps, choices, and priority actions can be agreed while keeping an eye on the overall direction. A strategy process is an opportunity to set a course, but there is plenty of steering that still needs to take place.

Any process for implementing a strategy needs to be simple and purposeful, and above all useful. Since membership engagement is so central to SWIM it also needs to offer opportunities for inclusion of member voices.

SWIM will use a modified 'after action review' based approach to implement the 2020 and beyond SWIM strategy (Figure 8). This will involve six-monthly online meetings (participants will include members of the Steering Group, and others invited from the wider SWIM network—group size around 15).

The meeting format will be open discussion based on a simple framework of five fundamental questions:

- → What did we do?
- → What did we expect to happen?
- → What actually happened and why?
- → What shall we do next?
- \rightarrow What is all this activity enabling SWIM to achieve?

Sub-question prompts (e.g. what outcomes did we focus on? What implications are there for our relationships or communications?) will help people reflect on what is going on in an open but inquiring way and link the discussion to SWIM's wider aims and core ways of working. The process should enable participants to note surprises, achievements and observations that can be the basis for communicating and reporting (e.g. newsletters). Before finishing the discussion, it is useful to sit back and look at the whole picture—is all this activity helping SWIM work towards outcomes, build relationships and engage with the wider SWIM membership? The process should be simple enough to integrate into an ordinary SWIM meeting and will also give a variety of people a chance to connect with SWIM.

SWIM 'Planning and review'

What outcomes did we focus on?

What actions & activities?

What outcomes did we not focus on?

Record & communicate activities

What did we do?

What shall we do next?

Any implications for our relationships

Any implications for priorities i.e. what we focus on?

or communications?

Any implications for how we are organised or any SWIM processes?

Working towards outcomes

Building relationships

Engaging SWIM membership

What did we expect to happen?

Solve issue?

Build relationship?

Communicate important information?

What actually happened and why?

What worked well?

What not so well?

Why was this?

Record & communicate success

Figure 8: SWIM bi-annual discussion to track progress and build momentum



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Participants in the online meetings:

SWIM Steering Group: Jean-Charles Perquin (NRC - SWIM convenor), Rochelle Carter (BOPRC), Deniz Ozkundakci (WRC), Lucy Baker (GWRC), Stefan Beaumont (NCC), Graeme Clarke (ECanRC - on behalf of Tim Davie ECanRC), Coral Grant (AC), Elaine Moriarty (ESRC).

Strategy review panel: Andrew Fenemor (Landcare Research – Envirolink project coordinator), Alan Johnson (MDC), Bevan Jenkins (WRC), Sandy Haidekker (HBRC), Michael Patterson (HRC), Paul Fisher (NCC), Rachel Ozanne (ORC), Tom Porter (GDC), Trevor James (TDC), Jonny Horrox (WCRC), Katie Blakemore (TRC).

This strategy, as well as a shorter summary with te reo translation, is available on the SWIM Portal or request a copy from SWIM Convenor Jean-Charles Perquin, Northland Regional Council, jeancharlesp@nrc.govt.nz