



Shane McGrath  
Director SGM Consulting (Aus) Pty Ltd

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## **Career Summary**

### **SGM Consulting (Aus) Pty Ltd - Director**

**2012 – 2013**

Providing practical advisory services to asset owners and contractors on project and program delivery for the management, construction, maintenance and operation of dams, water supply and irrigation infrastructure. Recent projects include:

- Melbourne Water – Peer review panel for Greenvale Dam Safety Upgrade
- National Capital Authority – Establishment of a Dam Safety Management System
- Goulburn-Murray Water – Dartmouth Dam ALARP evaluation
- Tasmanian Irrigation – Establishment of dam safety risk management framework
- Department of Environment and Primary Industries – Industry briefing on Dam Safety
- Goulburn Valley Water – Review of Corporate Risk Framework
- Melbourne Water – Establishment of a Dam Safety Management System

### **Goulburn-Murray Rural Water Corporation**

**1996 – 2012**

#### **General Manager Infrastructure (2009 – 2012)**

Responsible for the management of all the Corporations major assets and major investment programs, for both retail and bulk water services, management of the Corporations dam portfolio and bulk water services and the provision of property and environmental services (\$5,000M in assets).

Key achievements:

- Formed the new Infrastructure Division and developed and led a high performing, cohesive team, consisting of approximately 40% of the organisation's staff and an annual budget of \$130M.
- Delivered all programs within targets.
- Introduced a new asset management system (IBM Maximo) to meet the demands of modernised irrigation equipment and dam assets and ensure future efficient investment.
- Introduced a technology based project management system. Established business plans for each internal Unit setting out the key functions, justification for those functions and business improvement strategies.
- Enhanced productivity in maintenance and capital delivery through matrix management arrangements and a structured maintenance program for mechanical/electrical equipment.
- Developed the future maintenance and capital delivery model for G-MW.
- Represented the Corporation on the River Murray Water Committee of the Murray Darling Basin Authority and the \$200M Hume/Dartmouth Dam Safety upgrade program steering panel.

#### **Acting Managing Director (December 2010 – August 2011)**

Responsible for the leadership and direction of Goulburn-Murray Water (G-MW), Australia's largest rural water authority, during a period of major transformation and change.

Key achievements:

- Provided stability and leadership to the organisation during a time of great change and stress to staff.
- Leadership of G-MW's immediate and ongoing response to the worst floods ever recorded in the western part of the region.
- Worked with Government to ensure the financial stability of the organisation.
- Worked closely with two new temporary directors to stabilise and direct the organisation and led Director Inductions when a new Board was appointed.
- Managed customer and community interface to encourage continued support for the organisation.

***Executive Manager Dams (2008)***

Responsible for the Bulk Water Services business including management of the Corporations Dams portfolio and risk management functions (\$2,500 Million in assets).

Key achievements:

- Establishment of Land and on-Water management program for storages to engage with Local Government and communities and set priorities and responsibilities for assets.
- Commenced process to update all operations and maintenance manuals to modern standards.
- Directed works on the \$80M Mokoan Dam decommissioning, which was completed on time and budget.
- Commenced a program to introduce a coordinated systematic approach to dam safety through a dam safety management system.
- Joined the International Commission on Large Dams working group to write a new international guideline on dam safety management.
- Completed the \$10M second stage safety upgrade of Cairn Curran dam on time and under budget.

***Manager Major Projects (2006 – 2007)***

Responsible for all major projects undertaken by Goulburn-Murray Water, through investigation and planning to construction and commissioning.

Key achievements:

- Managed the introduction of an innovative Advanced Maintenance Program for the Corporation. This was a completely new initiative introduced in response to a change from renewals based to regulated asset based management. (\$27M first two years)
- Successful delivery of key water savings projects as forerunners to the Northern Victorian Irrigation Renewal Project. Completion of water savings technology pilot project (\$18M), Strategic irrigation supply measurement (\$21M) and the Tungamah district pipeline project (\$20M) as part of the \$80M Mokoan dam decommissioning project.
- Established and ran the FutureFlow Alliance selection process (\$290M).
- Completion of dam safety projects on time and under budget at Eildon and Tullaroop (\$48M).
- Introduced a Geographic Information System which has become the key asset and information source for management purposes in Goulburn-Murray Water.
- Introduced a project management methodology (Prince2).

***Manager Dam Improvement Program (1998 – 2005)***

Primary responsibility for management of the investigation, design review, risk assessment and project implementation of a \$200M program. The program encompasses the seventeen large dams managed by the Authority with a replacement value of \$2500M.

Key achievements:

- Developed a risk assessment methodology to determine priorities and the extent of works for dam upgrading projects based on life-safety and financial risks.
- Delivered seven dam upgrade projects within budget and time constraints and achieving excellent safety and environmental outcomes.
- Developed the project contracting strategies, including leading the first pure Alliance contract in Victoria for the Eildon Dam Improvement Project.
- Managed expert technical and stakeholder review of the dam improvement strategy to provide assurance to the Board and stakeholders.
- Introduced risk based cost estimating and project risk assessment to the Authority.

***Manager Technical Services, Headworks Division (1996 – 1998)***

This role combined completion of works for the \$40M Torrumbarry Weir Project on the Murray River with the management of a small multi-disciplined engineering team in undertaking the major maintenance and renewal activities at dams managed by Goulburn-Murray Water.

Key achievements:

- Managed detailed commissioning of complex automatic and remote controls for the radial gated weir, compilation of operation and maintenance manuals and construction history.
- Leadership of a multi-disciplinary engineering team to deliver the annual maintenance and renewal program for all Goulburn-Murray Water dams using a mixture of in-house resources, consultants and contracts.

- Utilized asset component risk-based processes to determine annual works programs.

***SMEC Victoria***

**1995 – 1996**

***Principal Project Manager***

Responsible for site management of the \$40M Torrumbarry Weir Project under contract to the Goulburn-Murray Rural Water Authority.

Key achievements:

- Completion of project within time and budget.
- Development and implementation of the environmental management plan for the project, including positive independent audit results.
- Successful stakeholder liaison with the local aboriginal community, historic buildings council, local businesses, local government and state government agencies.
- Management of all media and general public communications.

***Rural Water Corporation***

**1979 – 1994**

***Manager Project Management, HydroTechnology (1994)***

Responsible for the management and direction of personnel engaged on projects undertaken by the Project Management Group, the development of future projects and business direction based on HydroTechnology's commercial development plans.

Key achievements:

- Restructured and downsized the group to develop the viable commercial component of project and construction management whilst moving away from direct management of construction works whilst successfully completing three dam upgrading projects at Melton, Upper Coliban and Eildon dams.
- Developed a successful proposal for construction management of the Torrumbarry Weir replacement project and completion of essential short term sustaining works to the old weir.
- Development of a commercial orientation through proposals for construction management works at Hume and Burrinjuck dams for the NSW Water Resources Department and the generation of a commercial return to the Corporation.

***Senior Construction Engineer and Australian Team Leader (1992 – 1993)***

***Bah Bolon Project, Indonesia***

The project was a joint undertaking by the Government of Indonesia and the Government of Australia. Located in the Province of North Sumatra the \$100M project provided flood control, river training and complete irrigation infrastructure within a project area of approximately 20,000 Ha.

Key achievements:

- Building sound personal relationships with counterpart Indonesian staff.
- Completion of an important inter-governmental project on time and on budget after prior difficulties.
- Joint management with Indonesian counterpart staff of contracts valued at AUD\$30 million.
- As Australian team leader, finalised contracts and inputs relating to institutional strengthening and agricultural development to conclude Australian assistance to the ten year project.

***Senior Resident Engineer, Construction Branch (1990 – 1991)***

Directly responsible to the Chief Constructional Engineer for all major construction projects undertaken by the Rural Water Corporation. Work undertaken included extensive safety rehabilitation projects at Melton, Upper Coliban, Malmsbury and Cairn Curran Dams, all of which are classified by the International Commission on Large Dams.

***Manager Headworks, Murray North East Region, Cobram (1988 – 1989)***

Responsible for the maintenance and operation of the major irrigation storage dams and river diversion structures in north east Victoria.

***Resident Engineer, Construction Branch, Tatura (1981 – 1987)***

***Qualifications and Professional Development***

Bachelor of Engineering (Civil) – Monash University, Melbourne (1978)

Engineer of Water Supply – Victorian Water Act (1984)

Construction/Project Management Program, Institute of Administration, University of New South Wales (1990)

Australian Institute of Company Directors Diploma (2009)

Member of the judging panel for the Institution of Engineers, Victoria Division Excellence Awards (2008, 2010)

***Awards***

Churchill Fellowship – “International Practice and Use of Risk Assessment in Dam Management” (2000)

River Murray Medal – Presented by the Murray-Darling Basin Authority for outstanding service to the River Murray (2012)

Leadership member of two projects awarded Excellence Awards by the Institution of Engineers and a third Highly Commended project.

***Membership of Professional Institutions***

Fellow, Institution of Engineers Australia (Past Chairman, Goulburn Valley Group), Chartered Professional Engineer, Member of the College of Civil Engineers.

Executive Member of the Australian National Committee on Large Dams. Convenor for the Guidelines on Risk Assessment.

Australia’s representative on the International Commission on Large Dams, Dam Safety Committee.

***Publications***

Numerous papers published in the Bulletin of the Australian National Committee on Large Dams and in Congress papers of the International Commission on Large Dams on risk assessment and the safety upgrading of dams.

Member of the working group for the Australian National Committee on Large Dams publication, “Risk Assessment for Dams”, 2003.

Member of the working group for writing the International Commission on Large Dams Bulletin 154, “Dam safety management: Operational phase of the dam life cycle”.

“Risk Assessment and Dam Safety” USA Center for Infrastructure Protection and Homeland Security (CIP/HS) “CIP Report” Volume 10, No 4, October 2011, The Dams Sector. George Mason University School of Law.

***Languages***

English  
Bahasa Indonesia/Malay (basic)