



**Productivity Commission
Inquiry into progress with the
reform of Australia's water
resources sector**

VICWATER SUBMISSION

APRIL 2017

Thank you for the opportunity to make this submission, as well as meet the presiding Commissioners for this Inquiry during February. VicWater plays an active role in policy reform discussions at the Victorian state level and appreciates the invitation to participate in this national process.

VicWater notes the dual purpose of the Productivity Commission (the Commission) Inquiry's Terms of Reference, to review implementation of the National Water Initiative (NWI) as well as make recommendations for future reform priorities.

There is a strong belief among Victorian water corporations that the state has been a leader in implementing the National Competition Policy (NCP), NWI and other Council of Australian Government (COAG) water reforms. These reforms have delivered significant overall benefits to Victorians. Although this process is continuing (and is discussed herein), it is notable that these ongoing NWI reforms are occurring on a business as usual basis, they are not subject to ongoing debate and a case for them does not need to be re-prosecuted by VicWater.

This VicWater submission will place greater emphasis on future reform opportunities. In particular, opportunities for governments to regulate the water industry using more integrated risk-based instruments. It is VicWater's belief that whilst the continued implementation of NWI reforms will offer marginal (but worthwhile) improvements, the adoption of more integrated risk-based instruments to regulate the water industry potentially offers significant opportunities to achieve better outcomes for customers, communities and the environment.

NWI implementation

At a high level, the NCP established the path to unbundling water entitlements, creating clearer property rights and water trade. The NWI continued in this tradition, strengthened some elements and added new priority of restoring the balance between consumption and water for the environment.

Victoria has been an exemplar of the NWI reforms. The Victorian Government's Water for Victoria Discussion Paper (March 2016) included a summary of the strong foundations of Victoria's water management framework. Foundations that reflect Victoria's commitment to the NCP and NWI reforms. These include (on p11):

- ◆ A robust understanding of the characteristics of our water resource base, including availability, climate dependence, environmental needs, surface and groundwater connectivity and the hydrology and hydrogeology of our surface and groundwater systems
- ◆ A strong regulatory framework for the protection of public health and the environment
- ◆ A formally defined and specified water entitlement framework, with a mature water market in northern Victoria
- ◆ The capability to accurately measure and account for the use of water allocated under entitlements

- ◆ A water planning and management framework based on secure rights to water which factors in environmental needs
- ◆ Increased capacity to manage drought conditions through improved water infrastructure, including the desalination plant and water grid servicing key parts of the state
- ◆ Strong and transparent institutional and pricing arrangements for the Victorian water sector
- ◆ A revenue source for addressing the environmental costs that arise from consumption of the state's water resources, and other sustainable water management needs (the Environmental Contribution).

VicWater supports the analysis within the Issues Paper (p5) that these reforms have delivered material benefits to society.

The Victorian Government's [Water for Victoria](#) (2017) provides an up to date account of reform efforts that continue in the tradition of the NCP, NWI and COAG reforms. These ongoing reform efforts, of which VicWater is part, provides the basis for VicWater's earlier assertion that these ongoing NWI reforms are continuing on a business as usual basis.

This submission will not highlight all the elements of the Water for Victoria that are relevant to the Inquiry. However, on two topics discussed in the Issues Paper, indigenous values and integrated water management, Victoria is demonstrating notable leadership.

Recognising Indigenous values

The Issues Paper (p13) observes that "despite some progress, Indigenous participation in water management decisions was patchy and there had been no material increase in water allocation for Indigenous social, economic or cultural purposes".

Through Water for Victoria, the Victoria Government has set strategic directions that will: (1) improve recognition of Aboriginal values and objectives of water, (2) include Aboriginal values and traditional ecological knowledge in water planning, (3) support Aboriginal access to water for economic development, and (4) build capacity to increase Aboriginal participation in water management.

An early step in the implementation of these strategic directions is to better recognise and manage Aboriginal values and objectives of water. Melbourne Water and four Melbourne based retail water corporations (City West Water, South East Water, Yarra Valley Water and Western Water) have recently realised an opportunity to collaboratively engage with Traditional Owners and create longstanding partnerships that deliver shared beneficial outcomes. Instead of each water corporation individually approaching their respective Traditional Owner group in Melbourne (Wurundjeri, Bunurong, Boon Wurrung and Wadawurrung), a collaborative initiative has been established to respectfully approach each Traditional Owner as a coordinated group and offer an overview of the water sector and individual water corporation roles in providing water and wastewater services to greater Melbourne.

This approach to engagement is expected to provide ongoing opportunities to better integrate cultural water needs and Traditional Owner engagement into water resource management through actions that enable the co-design, co-development and co-management of water resources. In the longer term, water corporations will consider developing MoUs with each Traditional Owner to further strengthen our ongoing commitment to collaborating with Traditional Owners in maintaining access to and caring for Country and its resources.

Integrated water cycle management and demand management

The Issues Paper (p25) notes that the ‘integrated water cycle management’ (IWM) conversation is far from settled and that potential benefits of reduced impacts of droughts, improved urban amenity and lower cost need to be approached with rigour.

There are numerous case studies of Victorian water corporations showing leadership beyond traditional roles and collaborating with partners such as councils and developers to achieve IWM outcomes (with varying levels of cross-subsidy). These examples provide confidence of the steady adoption of integrated solutions within a broader portfolio of servicing options.

VicWater would welcome the PC’s perspective on an appropriate set of institutional arrangements to support expanded investment in IWM, to ensure that projects are cost effective and provide net benefits to customers and the community.

VicWater has previously suggested that a starting point would be to learn from the many IWM projects that have been implemented to date to: (1) evaluate the costs and benefits of projects that have been completed, (2) evaluate financial arrangements, (3) review decision making processes and barriers to adoption of IWM, (4) determine the projected and actual water savings provided by the projects, (5) identify opportunities to reduce future costs and enhance benefits, and (6) identify opportunities to streamline regulatory and approval processes.

Operational responsibilities for IWM in cities and towns should be established with regard to: (1) giving customers a greater role in decision making, (2) decisions made as much as possible by the communities and industries that will be affected, also having appropriate regard for externalities, (3) transparency regarding the price impacts of decisions, (4) processes to canvass alternatives and manage trade-offs, (5) government to set policy but not make operational decisions, and (6) flexibility regarding how outcomes are delivered.

Preliminary work is already occurring to operationalise aspects of the planning and delivery of IWM. This includes Yarra Valley Water, which has developed a draft framework for the “Investment Evaluation of Integrated Water Management (IWM) Proposals” and the Victorian Government Department of Environment, Land, Water and Planning, which has developed a draft “cost allocation framework for Integrated Water Management projects” and a draft approach for “Valuing externalities for integrated water cycle management planning”.

Future reform opportunities

The Issues Paper (p7) lists a series of priorities as “unfinished business” of the NWI. VicWater does not seek to diminish the importance of continuing to make progress on these matters. However, in Victoria, progress is occurring on a business as usual basis and does not seem to require intervention of the NCP, NWI or COAG variety that has been a driver behind historical reform efforts.

Instead the remainder of this VicWater submission will discuss a future reform direction of for the PC to consider as a part of its new functions. How to promote wider use of integrated risk-based instruments to regulate the water industry?

Victorian water corporations and VicWater (on their behalf) are active in numerous policy processes. A recent policy focus of government has been to require water corporations to deliver a broader and diverse set of outcomes, for example: more liveability and recreational opportunities as well as better indigenous, catchment protection, environmental and social and economic outcomes. These outcomes are to be delivered alongside traditional functions of delivering water and wastewater services.

A focus for this submission are the challenges that arise when the government directs the water industry to optimise multiple variables within a compliance regime, in which discrete output / outcome / result categories (for instance environmental, economic, human health, etc.) are overseen by separate and independent regulators, each with a narrow (legislated) mandate. Under such a regulatory structure it is difficult to innovate and optimise trade-offs between heterogeneous output / outcome / result categories – to optimise the overall environmental, economic and community outcome.

The adoption of integrated risk-based regulatory instruments may provide a pathway to better, more cost-effective, integrated outcomes for water corporations similar in potential to the economic and efficiency benefits achieved by property rights reforms.

Environmental regulation

Environmental regulation of Victorian water corporations offers significant opportunities to promote more integrated risk-based outcomes. Many aspects of the current environmental regulatory framework were developed when point source pollution to waterways was a dominant environmental concern. In the past, these institutional arrangements have resulted in significant improvements, particularly in the design and operation of wastewater treatment plants. However, they are not effective for managing diffuse pollution, presently the most significant cause of poor waterway health.

The current regulatory model is characterised by progressive tightening of standards for point source discharges. These are associated with high cost treatment plant upgrades, high chemical and energy requirements and progressively poorer environmental outcomes.

Many regulatory instruments are flexible and many regulatory processes aim to achieve risk-based outcomes. However, regulators often retain (and preferentially apply) non-risk based instruments. Non-

risk-based instruments (such as inflexible approvals and output-based regulations) are often retained by regulators because they simplify regulatory processes and reduce costs. However, these savings are illusory since significantly higher costs are incurred by water corporations. These costs are ultimately borne by water corporation customers and poorer outcomes are achieved.

As part of a contemporaneous [review into a key Victorian environment instrument](#), VicWater is having limited success promoting a new approach that places an integrated environmental risk assessment at the heart of the regulatory approval process and diminishes non-risk-based instruments. VicWater is also promoting flexible instruments for achieving compliance such as environmental offsets, whereby water corporations can invest in [catchment interventions](#) targeting alternate (more harmful) sources of pollution as an offset against traditional compliance obligations.

Positive case study – Victorian EPA Schedule Premises Regulations (SPR) Review

During the recent review of the SPR, VicWater negotiated with the Environmental Regulator (the EPA) to create a category of activities that receive an automatic exemption from a regulatory approval. This will allow water corporations to immediately proceed with a range of common infrastructure modifications and upgrades without a regulatory approval process.

Section 19A (1) of the Environmental Protection Act (1970) states that an “occupier of a scheduled premises must not do any act or thing, including the commencement of any construction, installation or modification of plant, equipment or process... except in accordance with works approval.” This clause has meant that water corporations have had to submit costly and time consuming works approvals for a multitude of benign and low risk modifications at facilities such as waste water treatment plants.

EPA has previously acknowledged that modification works approvals serve limited purpose and in response created the works approval ‘exemption’. However, that alternate approval process for ‘an exemption’ was also too onerous. The works approval exemption process was often almost equal in regulatory burden to the works approval. This example illustrates some regulators’ strong preference for controlling inputs and outputs as their primary regulatory tool. Whereas a contemporary risk-based approach places a stronger emphasis on targeting desired outcomes.

VicWater negotiated with the EPA to leverage the hitherto underutilised flexibility in the Act (that the EPA can issue “separate requirements specified in a notice”) to create a codified exemption from the regulatory approval process for an agreed, pre-defined set of benign and low risk activities when a set of preconditions are met.

Positive case study – Victorian Essential Services Commission (ESC) Customer Consultation

A critical element of a robust, integrated risk-based regulatory policy instruments is understanding and incorporating communities’ values and perspectives on risk.

The Victorian water industry's economic regulator is currently implementing a [new water pricing approach](#). As a part of the new approach, in order to gain regulatory approval for its pricing submission, a water corporation must “demonstrate... how it has taken into account the views of its customers” (p16 of the ESC's *Water Pricing Framework and Approach*). Furthermore, water corporations should “clearly present to the regulator: (1) a set of customer outcomes that reflect the value customers will receive... demonstrating how each has been derived and how it relates to the business's customer engagement processes, (2) the measurable outputs and deliverables and associated targets that will demonstrate achievement of each outcome, (3) the actions or programs that the business will undertake to meet the agreed targets, (4) the costs and cost savings associated with each of these, (5) how these costs are reflected in tariff structures and prices charged to customers” (p19).

VicWater is very supportive of this new approach, anticipating more rigorous consultation on community priorities, greater transparency of cost impacts, transparent consideration of options and trade-offs, establishing customers willingness to pay, defining measurable outputs and deliverables and associated targets. Under the outgoing regime, the efficient cost of meeting rigid, non-risk-based regulatory requirements was established and costs were directly passed on to customers with little opportunity for them to influence the outcome.

Positive case studies – Victorian EPA reforms

The Victorian Government has proposed a [series of reforms to the EPA](#) and the environmental regulatory framework. A key feature of the reforms is the replacement of many rigid, non-risk-based regulatory requirements with a “General Duty” to protect the environment.

The proposed “General Duty” will apply to everybody and borrows successful concepts from workplace safety regulation. It is inherently risk-based due to use of language requiring “reasonably practicable” steps be taken to protect the environment. In order to discharging one's general duty, one must: (1) identify the hazards, (2) identify appropriate controls, and (3) implement the controls.

What constitutes “reasonably practicable” will be set by formal guidelines or formal / informal standards within the industry, but there is flexibility of how to achieve the outcome of risk management. The concept of “reasonably practicable” is expected to continually advance, leading to ever-improving outcomes. The current (outgoing) regime focuses on the sensitivity of receiving environment and put in place rigid controls (such as “this material will not leave the premises” or “this quantity is allowed to leave the premises”) Future licenses will focus on controls, If everything reasonably practical has been done, there can be no offense. However, it also has preventative power, because an offense can exist if “reasonably practicable” controls are not in place, even if no harm to the environment has occurred.

Conclusion

In this submission, VicWater has highlighted the leading role of the Victorian water sector in implementing, delivering and providing innovative solutions to the NWI reforms, including through the recent release of *Water for Victoria*.



VicWater submission on National Water Reform

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Integrated risk-based instruments provide a pathway to better, more cost-effective and integrated outcomes for water corporations. Regulatory frameworks must to be set up specifically for this purpose. Flexible instruments that require water corporations and regulators to critically evaluate risk, transparently consider trade-offs and understand community values must replace rigid input- and output-based instruments.

VicWater has achieved a recent success via a codified exemption from a regulatory approval process for an agreed, pre-defined set of benign and low risk activities. However, some regulators (particularly at the operational level) are resistant to adopting these instruments, because rigid and narrowly defined instruments simplify regulatory processes and reduce their costs.

VicWater would welcome the PC's perspective on broadening the adoption of integrated risk-based regulatory instruments as a potential future reform priority. In the absence of integrated risk-based regulatory instruments, it is difficult to envisage how integrated outcomes including: more liveability and recreational opportunities as well as better indigenous, catchment protection, environmental and social and economic outcomes can be achieved alongside tradition functions of water and wastewater services, without a significant increase in costs to customers.