



2015 Inquiry into the Environment Protection Authority

A Submission to the Ministerial Advisory Committee

About this submission

Melbourne Water is proud of its environmental performance and owes much of this success to its partnership with the Environment Protection Authority (EPA). This foundation provides a strong basis for improvements into the future.

Achievements in protecting and enhancing the waterways and bays of the Greater Melbourne Region, along with significant advances in resource recovery from our wastewater treatment plants, reduction in greenhouse gas emissions, and improving local environments through the better management of our sites, have all occurred with the direction and support of the EPA.

This inquiry provides an opportunity to continue improving environmental outcomes and to do so at a lower overall cost to communities. It also provides an opportunity to consider the role that the EPA can play in improving the health of the region's waterways, particularly in working with Melbourne Water in its role as caretaker for river health.

Together, these approaches will reinforce Melbourne's reputation as one of the world's most liveable cities.

This submission compliments matters that are being raised by VicWater

Melbourne Water contributed to, and supports, the submission to the inquiry prepared by VicWater on behalf of the Victorian water industry.

VicWater's submission notes the multifaceted relationship of water utilities with the EPA. This submission provides additional discussion on matters that are specific to Melbourne Water and is intended to be read in conjunction with the submission made by VicWater.

Our submission therefore reflects the two distinct perspectives of our relationship with the EPA:

1. As a regulated business that operates licensed sites
2. As an environment protection agency in our role as regional waterway manager.

Enhancing life and liveability: Melbourne Water's approach

Melbourne Water was established almost 125 years ago to address contemporary environmental health issues for the settlement of Melbourne. Today we continue to provide high quality, reliable, and sustainable services to the city and our customers.

Initially our work focused addressing the city's need for clean water supply and sanitation. Later, drainage and flood protection issues emerged, followed by the need for greater environmental protection of Melbourne's waterways and bays. In 2015 Melbourne Water faces a mix of global and local environment issues that affect each of these business areas, and is adapting its services accordingly.

Melbourne Water's roles and approach reflects these drivers. A common theme in our work is to create linkages between different activities that collectively protect the environment and enhance the liveability of the Greater Melbourne region. We do not act alone, and collaboration with our customers, regulators and the community has become a fundamental process to enable success in managing the water cycle for better outcomes.

Examples of our environmental achievements

- Upgrading the Eastern Treatment Plant and Western Treatment Plant to reduce treated sewage discharges to Port Phillip Bay and the ocean.
- Improving the environmental performance of the Eastern Treatment Plant and Western Treatment Plant to reduce odours, provide refuge for wildlife and recover resources for beneficial reuse. The Western Treatment Plant and other sites that we manage are recognised as internationally significant migratory bird habitats under the Ramsar convention.
- Introducing water sensitive urban design and rural land management programs to reduce catchment based pollution of Port Phillip and Westernport Bays
- Developing recycled water, biosolids reuse and energy recovery opportunities at the Eastern Treatment Plant and Western Treatment Plant
- Improving the energy efficiency of our operations to reduce greenhouse emissions
- Protecting and improving the 8400 km of waterways that we manage in the Port Phillip and Westernport region.

Looking to the future

Further environmental gains are likely to require some new ways of thinking and acting. This reflects both the changes occurring in the environment as well as the potentially diminishing returns from further investment in current environmental protection approaches.

Firstly, we see an opportunity for the continuous improvement of licensed sites and their further evolution into sites of biodiversity and resource recovery in addition to their primary function. Regulation of these sites should not just focus on their primary function nor should individual sites be managed without consideration of their broader, regional contribution to environmental condition.

Secondly, there is an opportunity for the EPA, Melbourne Water (as waterway manager) and other protection agencies to work more collaboratively to enhance environments and engage more proactively with communities across the Port Phillip and Westernport region. This requires a more integrated approach that includes a shift in regulation from 'protect' to 'protect and improve' environmental outcomes, as well as a partnership approach that utilises the full range of resources, expertise and approaches available in these agencies.

Opportunities to achieve better environmental outcomes

The duality of Melbourne Water's roles creates a unique perspective on the opportunities for better environmental outcomes.

Improvement opportunities have been identified within a framework (Table 1) that considers how environmental regulation can evolve in line with improvements in practice. This ensures that regulation addresses the priority issues and delivers long term improvements. While this framework does not explicitly consider fundamentals such as the enforcement, these are supported as continuing and important elements for environmental protection.

In Table 2, we have highlighted some opportunities against this framework, where priority environmental issues could move from their current state to another level to improve outcomes.

An enabling EPA

To be effective, this framework requires the EPA to be an active and strong driver of improved environmental outcomes. To enable this, the EPA can:

1. Be the voice for the community's expectations for environmental protection. Often the environment is without a clear voice in key planning and operational decisions. This change can be achieved by leading a conversation with community, industry and other environmental protection agencies on where the best environmental improvements can be made.
2. Balance concern and action for the 'worst' environmental issues with an effort to lead protection of the best. This principle of catchment management ensures that existing values are not degraded and avoids costly future restoration or rehabilitation. Achieving this requires a holistic approach with catchment managers, councils and others to prioritise common areas of concern using the many sources of evidence and expertise that are collectively available.
3. Be evidence-based in its approach, supported by continued investment in credible science, engagement and support of the community, and evaluation of the value added by EPA's activities.
4. Enable improved mechanisms to prosecute or pursue polluters in order to resolve environmental incidents. Inability to pursue polluters has the potential to cost Melbourne Water significant amounts when waterway clean-ups are required. By way of example, a recent diesel discharge by a third party in Port Melbourne resulted in a multi-million dollar clean up to avoid pollution of Port Phillip Bay. This was funded by Melbourne Water's customers and reduced funding available for other targeted waterway protection actions.

5. Be a customer focused organisation that is:
 - i. consistent: ensuring that it approaches issues in a consistent manner. For example EPA sometimes requires emergency sewer discharge notification to be made to Melbourne Water as the waterway manager and at other times does not.
 - ii. flexible: being focused on the outcome and able to tailor solutions to the context
 - iii. Empowered: being agile to respond quickly within agreed frameworks and delegations
6. Influence policy and lead the way in highlighting new areas of potential regulatory and non-regulatory reform. This may involve EPA providing expert opinion and leadership to seek environmental improvement.
7. Be resourced to deliver. To be an enabler of environmental improvements, EPA will need to invest in its people to ensure they include knowledgeable environmental leaders, systems thinkers and facilitators to identify environmental issues and opportunities and translate these into solutions. It will also need to ensure that the important enforcement function is maintained.

Table 1 – A framework of levels of regulation

<p>Level 1 Non-interventionist approach</p>	<p><i>Suits:</i> this approach is characteristic of issues that:</p> <ul style="list-style-type: none"> • Are a low priority or threat– ie the issue does not warrant regulatory intervention • Fall into regulatory gaps <p><i>Approach:</i> No or minimal action</p>
<p>Level 2 Introduce structure</p>	<p><i>Suits:</i> this approach is characteristic of issues that require:</p> <ul style="list-style-type: none"> • Performance to be lifted to meet community expectations • Consistency to ensure minimum standards are met • Accountabilities to be clarified and progress to be demonstrated <p><i>Approach:</i> Introduce standard procedures, clear roles and responsibilities, accountability and evaluation of outcomes. This stage focuses on process.</p>
<p>Level 3 Flexible and risk based</p>	<p><i>Suits:</i> maturing industries where environmental performance has been proven and enables:</p> <ul style="list-style-type: none"> • A shift from minimum standards to best practice, recognising that what is 'best' is contextual • Tailored solutions to manage the costs of environmental compliance • Effort directed to the most significant threats in a catchment <p><i>Approach:</i> A focus on risks allows adaptation of approaches for different situations. The balance shifts to include outcomes along with the process.</p>
<p>Level 4 Incentive to go beyond best practice</p>	<p><i>Suits:</i> this approach suits industries or companies that have:</p> <ul style="list-style-type: none"> • Earned the trust of regulators and the community by consistently exceeding required performance • An opportunity to create new community value by delivering environmental outcomes in new ways, e.g. economic value from waste • Moved ahead of regulation and where a compliance-only mindset will deliver a sub-optimal environmental outcome. <p><i>Approach:</i> Enable industry to determine how it will deliver the required outcomes. Streamline process based regulation, focus on (and evaluate) outcomes and offer incentives to achieve new best practice benchmarks.</p>

Table 2 – Opportunities to rethink the regulation of priority environmental issues to shift from the current state to a new state to improve outcomes

Lv 1: Non-interventionist Approach	Lv 2: Introduce structure	Lv 3: Flexible and Risk based	Lv 4: Beyond best practice
<p>→ Increasing regulation sophistication to reflect demonstrated performance and risk →</p>			
<p>1. Diffuse pollution in urban and rural catchments →</p> <p>2. Legacy environmental issues (in particular where a polluter cannot be identified or prosecuted) →</p> <p>3. Prioritising environmental threats. Effectively incorporating newly identified threats into frameworks as they arise. For example we now understand the role of water flows as a significant driver of ecosystem health in urban and rural waterways, but this is a gap in current approaches →</p> <p>4. Preventing new threats. Avoiding the occurrence of new problems. For example urbanisation is a major threatening process in the Port Phillip and Westernport region that is not well managed by current environmental regulatory approaches →</p>	<p>New tools to manage diffuse pollution including enforcement and incentive approaches; managing point and diffuse pollution within an integrated framework.</p> <p>“All threats are on the table”: considering all threats to waterway health so that priority issues at the catchment scale are being addressed and solutions with the greatest leverage are identified.</p> <p>New approaches and tools, including incentives, capacity building or urban planning tools to manage new threats.</p> <p>5. Managing point sources in scenarios where significant past investment, particularly infrastructure based solutions, means that further works will deliver diminishing environmental returns →</p> <p>7. Resource recovery where barriers to innovation limit opportunities for environmental gains →</p>	<p>Developing new approaches and tools to transform legacy issues into environmental successes by seeking to restore environmental condition. Based on polluter pays principles but focused on creating and enabling effective responses.</p> <p>A framework for achieving desired environmental outcomes at lowest community cost that :</p> <ul style="list-style-type: none"> • Considers relative risks of different threats and sets targets that are appropriate for the receiving environment • Establishes how environmental outcomes are assessed • Enables asset and non-asset solutions • Clarifies roles and responsibilities to enable integrated solutions (e.g. risk sharing) • Establishes how lowest community cost is determined. <p>6. Licences where barriers to innovation prevent the delivery of better environmental performance or reduction of costs to meet the required environmental outcomes →</p> <p>Resource recovery is enabled where there is a net environmental gain. Environmental regulation is reviewed to avoid overlap with health or other regulation. Innovation is supported through trials and evaluation.</p>	<p>Earned autonomy model to specify outcomes for high performers and incentivise innovation. Requires a focus on environmental outcomes with flexibility in how these are achieved.</p>