



Stream Flow Management Plans

A brief history of Stream Flow Management Planning in Victoria

Introduction

The management of Victoria's water resources has evolved in response to social, economic and environmental pressures.

One hundred years ago, Governments allocated water to facilitate economic development without consideration of the environment.

One hundred years later, after experiencing changes in climate and economic market demands, social preferences have shifted

from economic prosperity (at a cost to the environment) to economic sustainability. Today's priority is to protect, maintain and restore the environment so as to meet current economic demands, but also to leave the environment in a good condition so that it can be enjoyed by current and future generations.

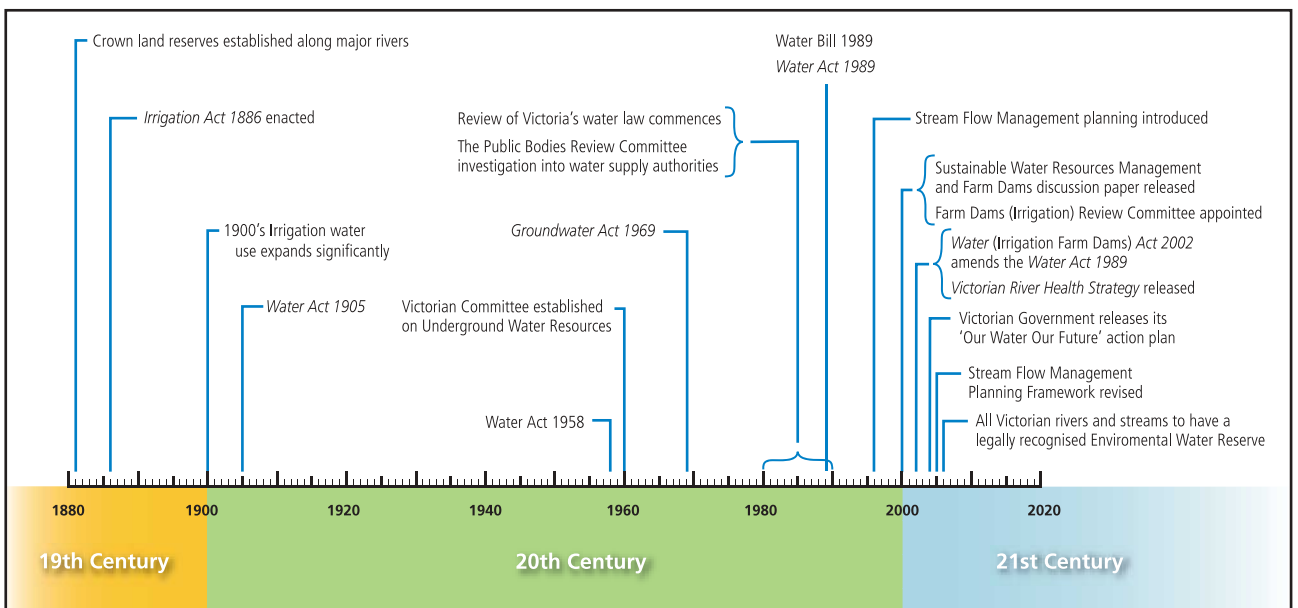


Figure 1. A brief history of Stream Flow Management in Victoria.

19th Century

Australia's climate is known as the driest the world over. The need to manage Victoria's precious, yet limited water resources became apparent in the early days of land settlement.

The first step was taken in 1881 when Crown reserves were established along the banks of major Victorian rivers giving common law riparian rights and obligations to the use of water and the passing of stream flows.

Five years later the Government introduced the *Irrigation Act 1886* which vested in the Crown rights to the use and flow of water in Victoria's rivers and streams. The intention of this Act was to replace common law riparian rights with statutory rights because common law only allowed people to use water for domestic and stock use. The *Irrigation Act 1886* allowed Victorians to apply for annual permits for irrigation and other purposes. The permit holder was entitled to take water for irrigation or commercial use, but was bound by an overriding responsibility to let the stream flow on.

20th Century

Surface water use

From the early 1900s irrigation water use in Victoria expanded significantly. This was fuelled by Victoria's increasing population accompanied by the construction of major water supply infrastructure (e.g. Lake Eildon) which would now regulate the flows of some major rivers to fulfil the economic demands of Victoria's growing society. The *Irrigation Act 1886* was succeeded by the *Water Act 1905* and later the *Water Act 1958* which introduced further controls on the taking and using of water as Victoria's reliance on water continued to expand.

Under the *Water Act 1958* the Governor in Council, on behalf of the Crown, issued fifteen-year licences on the larger regulated and other more highly reliable unregulated rivers. The State Rivers and Water Supply Commission issued annual permits on the less reliable unregulated rivers and streams.





Groundwater use

During the late-1950s the Government and community were concerned about the impacts of uncontrolled groundwater use in some parts of Victoria and recognised the need to appropriately manage this resource. In some areas of the State groundwater was used as an alternate supply to stream flows and in other areas it was the sole supply.

In the early-1960s the Government established the State Development Committee on the Underground Water Resources of Victoria to review the use and management of groundwater in Victoria. In 1962 the Committee recommended the introduction of legislation to manage groundwater use.

Following this recommendation, Government introduced the *Groundwater Act 1969* which allowed Groundwater Conservation Areas to be declared that capped extraction from groundwater systems and allowed licences to be amended to comply with the caps.

Major water resource management reforms

During the mid-1980s, a review of Victoria's water law commenced following the Public Bodies Review Committee investigation into water supply authorities.

This investigation highlighted the need for a complete overhaul of legislation related to water resource management. Public consultation on the review commenced in 1986 with the release of the *Water Law Review Discussion Paper*. The discussion paper provided a framework for the review of legislation and outlined proposed changes to the *Water Act 1958*.

The introduction of the *Water Bill 1989* followed the water law review and subsequently the *Water Act 1989* was introduced consolidating a number of Acts into one comprehensive piece of legislation. The *Groundwater Act 1969* and the *Water Act 1958* were repealed.

Public discussion on the Water Bill 1989

Originally the *Water Bill 1989* provided for the declaration of Water Supply Protection Areas for surface water, groundwater or both resources. The objective was to prepare a management plan to manage the water resources of the area in a fair and reasonable manner.

The Bill enabled management plans in Water Supply Protection Areas to place restrictions on take and use licences (formerly known as annual permits). It could also require licensing of private dams used for irrigation and commercial purposes and could place restrictions on the building of private domestic and stock dams.

In response to community submissions, numerous amendments were made during the passage of the Bill and provisions were removed that allowed the declaration of Water Supply Protection Areas to manage surface water resources, however, retained those provisions for groundwater.

Amendments to the Bill, which translated into the *Water Act 1989*, allowed the declaration of Groundwater Supply Protection Areas. These provisions were retained due to the existence of the KooWeeRup / Dalmore Groundwater Conservation Area, which had been declared in 1971 under the *Groundwater Act 1969*.

Under the provisions of the Groundwater Supply Protection Area legislation a number of areas were declared and management plans prepared.

Sharing Victoria's water resources

During the mid 1990s the rights to water of Authorities, which were allocated by the Crown, were poorly defined. It was also identified that the sharing of any remaining stream flows in the river between licence holders should recognise the needs of the environment.

Following the allocation of bulk entitlements to Authorities there was a greater focus by the community to manage the sharing of flows between licence holders and the environment in unregulated rivers.

The introduction of Stream Flow Management Plans

In the midst of the drought throughout the mid-late 1990s, the declining stream flows in Victoria's rivers led Government and communities to recognise the high allocation of water and reliance on unregulated stream flows. Water users reliant on summer flows suddenly encountered restricted access to share the available stream flows among other users and were made aware of the environmental impacts of taking and using water in summer. The concept of Stream Flow Management Plans was introduced in the mid 1990s and provided water users and resource managers with the opportunity to discuss and formalise flow sharing arrangements in highly allocated catchments with a history of flow sharing issues.

In August 1996 concerns over water security and environmental issues led the then Department of Natural Resources and Environment to commence a program of preparing Stream Flow Management Plans. Consultative committees involving farmer, community and agency representatives prepared the management plans. The broad objective of these plans was to balance the needs of existing consumptive users, the environment and other non-consumptive users.

Consultative committees appointed to prepare Stream Flow Management Plans between 1996 and 2000 worked diligently and used their best endeavours to prepare management plans which could be implemented by licensed water users and worked toward Government's long-term river health objectives.

Because the management plans had no legislative basis, there was no statutory approval mechanism which meant the plans could only be adopted by the relevant licensing authority as a specific management policy to the river it applied.

This process identified significant gaps in unregulated river management policy. These included the statutory status, enforceability and implementation of Stream Flow management plans, the consideration of urban bulk entitlements, metering, irrigation and commercial farm dams, waterway determinations and the definition of a 'waterway'.

21st Century

Farm Dams debate

In response to issues raised from Stream Flow Management Plan preparation, the Government in April 2000 released a discussion paper entitled 'Sustainable Water Resources Management and Farm Dams'. The discussion paper not only sought comments from the community on a licensing framework for farm dams but also asked the question whether the inclusion of a provision for the declaration of Water Supply Protection Areas for surface waters should be revisited.



The discussion paper recognised the detrimental impacts to downstream water users and the environment caused by the uncontrolled construction of private dams for irrigation and commercial purposes, whether or not the dam is located on a waterway.

The Farm Dams (Irrigation) Review Committee, appointed to advise Government on licensing issues, concluded that all water use for irrigation and commercial purposes from private dams, or from springs and soaks, should be licensed whether or not the dam is located on a waterway.

The Committee also identified the need for communities to be involved in the management of water resources in over allocated catchments and advised that the declaration of Water Supply Protection Areas for surface waters should be included in any amended *Water Act 1989*.

In April 2002 the *Water (Irrigation Farm Dams) Act 2002* amended the *Water Act 1989* that (among other things) required the registration or licensing of irrigation and commercial farm dams and to allow the declaration of Water Supply Protection Areas for surface waters. Management plans could now be legally prepared and enforced for the management of groundwater and surface water resources.

Parliament through the legislation established a rigorous process to ensure that principles of fairness and sustainability are primarily considered in the preparation of a management plan.

These amendments also enabled those Stream Flow Management Plans that achieved Government and community objectives prepared prior to 2002 to be legally recognised.

Former consultative committees identified that a set of guiding principles was needed to support the preparation of future Stream Flow Management Plans. In response to this, the then Department of Natural Resources and Environment developed a Framework to be used by consultative committees to guide them through the legislative process.

***Our Water Our Future* action plan**

The impact of the drought, increasing water use demand by growing urban and rural-urban populations and the poor condition of Victoria's major rivers, wetlands and estuaries prompted Government to act swiftly to change the way Victorians consume, manage and allocate water resources, to ensure a sustainable future for the economy, society and the environment.

In June 2004 the Victorian Government released its *Our Water Our Future* action plan. An important component of *Our Water Our Future* is establishing Environmental Water Reserves, the legal share of water for the environment, for all Victorian rivers, streams and groundwater systems.

Government introduced the *Water (Resource Management) Bill 2005* to amend the *Water Act 1989* and from 2006 the Act will legally recognise the Environmental Water Reserve as the legal share of water for the environment.

The preparation and implementation of a Stream Flow Management Plan enhances the Environmental Water Reserve in priority, flows stressed, unregulated rivers.

Stream Flow Management Plans, through the Victorian River Health Strategy, released in 2002, and the *Our Water Our Future* action plan are recognised as a crucial part of achieving Government's river health objectives.



Through the *Our Water Our Future* action plan, Government has committed to financially assisting active licence holders with the changes introduced by a Stream Flow Management Plan. To assist consultative committees through this next generation of Stream Flow Management Plan preparation, Government is revising its Stream Flow Management Planning Framework to reflect its new approach to managing Victoria's priority, flow stressed, unregulated rivers.

In catchments where the preparation of a Stream Flow Management Plan has not been identified in the *Our Water Our Future* action plan, Government has acted to ensure these unregulated rivers and streams, which are currently not significantly flow stressed, remain this way.

The Government's actions, implemented through licensing authorities, recognise the ecological stress caused by summer diversions. To progress toward achieving river health improvements in unregulated rivers, Government has:

- Capped the consumption of water in most of the State's southern catchments which complements the Murray-Darling Basin cap in Victoria's northern catchments;
- Introduced metering of all significant irrigation and commercial water use;
- Continued to allow licence transfers;
- Introduced bans on the issuing of new licences which allow diversion of water during the period November to June inclusive;
- Allowed the issuing of new licences for the July to October period where there is spare water under the sustainable diversion limit for the catchment; and
- Allowed consumptive users the opportunity to redress over-use.

In all Victorian rivers, streams and groundwater systems, Government and communities shall be more accountable for the planning, allocation, use, monitoring and reporting of Victoria's water resources to better position Victoria in securing its water supplies for the future.

As our knowledge and understanding of the impacts of water allocation and use, natural disasters (e.g. bushfires) and climate improves through time, Victoria will continue progressing toward the sustainable management of its water resources.



Further information

For more information about Stream Flow Management Plans
please contact:

DSE Customer Service Centre 136 186

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