# Water Supply Works and Services Bill

## EXPLANATORY MEMORANDUM

This Bill is to give Parliamentary authority for the expenditure of \$56 000 000 for carrying out works of country water supply, drainage, sewerage, flood protection and river improvement as set out in the tables to the clauses of the Bill.

The full amount of the provision for which authority is sought in the Bill will not be expended during the current financial year, but Parliamentary authority is required so that investigations may proceed, plans may be prepared for improvements to town water supplies controlled by local authorities, and works already authorized may be continued or commenced after the close of the financial year prior to the enactment of the next Works and Services Act.

## NOTES ON THE TABLES

#### CLAUSE 4—STATE WORKS

The Table to this clause provides authority for expenditure of \$37 300 000 on the construction of works, as set out under the respective items of the Table under the direct control of the State Rivers and Water Supply Commission. The authority provides for the continuation of works on hand and for the commencement of construction of approved major projects.

A total of \$23 530 000 is planned for expenditure during the 1980-81 financial year under the terms of this clause.

Details of works to be undertaken under the items of the Tables are provided below—

Item		Details	Proposed Expenditure during 1980–81 Financial Year	Proposed Provision in Bill
1	Sub- item	STATE WORKS—STORAGES AND HEADWORKS		Marie esta esta esta esta esta esta esta est
			\$	\$
	1	Mitchell River Project  Provision is made in this sub-item to enable th Commission to construct a dam of 15 000-megalitr capacity on the Mitchell River. The dam, estimate to cost \$16.6 million, will provide reasonable securit to the irrigated vegetable industry on the Mitchel River Flats.	e d y	2 000 000
	2	Lang Lang River Works  Provision is made under this sub-item to enable erosion control works on the Lang Lang River to be undertaken. The amount proposed for expenditure in 1980–81 will be utilized to complete construction of a drop structure.	i. I	50 000

Item		Details	Proposed Expenditure during 1980–81 Financial Year	Proposed Provision in Bill
1	Sub- item	STATE WORKS—STORAGES AND HEADWORKS—continued		
			\$	\$
	3	Other Storages and Headworks  Provision is made under this sub-item to meet the cost of improvements to be carried out on storages, headwork and main channels including buildings, camping picnic and recreational facilities and conveniences a storages. Principal projects for this financial year include continuation of improvement works on the Waranga Western Main Channel and reconstruction works at Lake Eildon and Goulburn Weir.	s ;; t r e	1 600 000
	4	Lake Merrimu Project  The first stage of the Lake Merrimu Project, costin \$3.9 million, comprised a dam on the Coimadai Creel and a tunnel to direct the waters of Goodman's Creel into the new storage. This scheme makes available reserve supply for the Bacchus Marsh and Werribe Irrigation Districts as well as the growing urban are at Melton and provides for expected urban an industrial development in the area immediately west of the metropolis.  The second stage will further supplement supplies to the storage and involves construction of a small diversion weir on the Lerderderg River and a tunned between the river and Goodman's Creek.  The amount of \$40 000 proposed for expenditure in 1980–81 will complete Stage 2 at a cost of \$11 million.  The third stage of the project involves raising the height of the dam to provide the additional capacity to the utilize the additional water supplies gained from the first two stages. Stage 3, estimated to cost \$13 million has been deferred pending availability of funds.	k k a e a d f c ll e 3	100 000
	5	Tanjil River Project	e e d n	4 750 000
		State Electricity Commission of Victoria.  The proposed total expenditure for 1980–81 is \$6.	_	
	., •	million.		
	6	Sandhurst Reservoir  Provision is made under this sub-item to construct a offstream storage of 2500-megalitre capacity nee Bendigo at an estimated total cost of \$8.5 million. The storage will improve urban water qualit significantly and increase security of water supply it the Bendigo area.	ır ı. y n	3 000 000
		The proposed expenditure of \$0.5 million in 1980-8 will enable preliminary site works to be undertaken.	\$ <b>1</b>	
		Total Item 1.	. 6 285 000	11 500 000

[tem		Details H	Proposed Expenditure during 1980–81 Financial Year	Proposed Provision in Bill
2	Sub- item	OTHER STATE WORKS	,	2 1 V
	1	Irrigation Districts		\$ 6 700 000 (2 000 000)
		(b) Irrigation and Water Supply Districts  Authority is sought for the construction by district centres of water supply and drainage works to serve irrigation districts and the urban districts therein. The amount provided for expenditure in 1980-81 includes \$1.1 million for expenditure on irrigation and drainage works in the Goulburn-Murray Irrigation District and \$0.3 million on provision of housing, offices and workshops for irrigation centres.  Works will be continued in the Mallee irrigation districts on the replacement of open channels with pipelines to increase the efficiency of operations through the reduction of water losses by evaporation and seepage. It is proposed to spend \$0.4 million on these works in 1980-81.  (c) Goulburn-Murray Major Works  The Commission's Major Works Centre at Tatura has been carrying out an extensive construction programme in the Goulburn-Murray Irrigation District. Authority	(775 000)	(1 200 000)

Item		Details	Proposed Expenditure during 1980–81 Financial Year	Proposed Provision in Bill
2	Sub- item	OTHER STATE WORKS—continued		
	aga iya iya ayan naka artuuri	is sought for the continuation of this programme which involves the enlargement and remodelling of main irrigation channels and other distributary works to enable full use to be made of additional water made available for irrigation following completion of major	n O . e: r	\$
		storages and drainage works to maintain the efficiency of irrigation practices.	у	
	2	Coliban System  The provision under this sub-item is sought fo improvements, enlargements and extensions of wate supply channels and mains and reticulation work throughout the Coliban System and Newstead Urban District. The principal project being undertaken thi financial year is improvement to the Western Hig Level System \$352 000. The sum of \$389 000 has been allocated for reticulation replacements an extensions during 1980-81.	or S n S h S	2 200 00
	3	Mornington System	. 5 467 000	8 000 000
		Continued urban and industrial development has resulte in a rapid increase in demand for water. A majo programme of installation, enlargement and extensio of main supply works, storages, pipelines an reticulation mains will be undertaken during the current financial year to meet this increased demand.  The major project being carried out this financial year is continuation of the Cardinia-Franksto Pipeline, estimated to cost \$22 million. An amount of \$2.3 million has been allocated for 1980-81 standard for 1980-81 standard for 1980-81 standard for 1980-81 to continuation of a pipeline from Devilbend Reservoit to Mount Martha, estimated to cost \$1.2 million an amount of \$400 000 has been allocated for acquisition of land required for the future enlargement of Devilbend Reservoir. An amount of \$487 000 has been allocated for roofing of storage tanks. These	or n d e e ir n.	
		works will improve water quality throughout the Mornington System. \$325,000 has been allocated in 1980–81 for reticulation replacements and extensions. This sub-item also provides for further works on the	ne n S.	
		reticulation system in the Wonthaggi Urban District.		4 000 000
	4	Authority is sought to enlarge and extend the existin distribution and reticulation systems. The majo project being undertaken is continuation of work on the Bellarine-Drysdale Pipeline estimated to cost \$1.7 million. An amount of \$259 000 has been included in the works programme for 1980-81. An amount of \$52 000 has been allocated for water treatment work to be carried out during 1980-81 and \$27 000 has been allocated for metering.	or ne of	1 000 000

Item		Details	Proposed Expenditure during 1980–81 Financial Year	Proposed Provision in Bill
2	Sub-	OTHER STATE WORKS—continued		
			S	\$
	5	Otway System	247.000	400 000
		This sub-item provides for enlargement of headworks and improvements to storages, service basins and distributary and reticulation works in the Otway System.		
	6	Waterworks Districts, Generally	775 000	1 200 000
		Works for which authority is sought include the extension and enlargement of channels and pipelines, the construction of storages and improvements to urbar and rural supply works within waterworks districts principally in the extensive Wimmera-Mallee System	1	
	7	Flood Protection District	160 000	250 000
		Approval is required for replacement of bridges and other structures and improvements to flood protection works within the Koo-wee-rup Flood Protection District.	1	
	8	Surveys, Investigations, Designs and Research  Authority is required for expenditure on surveys, designs investigations, environmental and hydrological studie in connexion with existing and further projects, for the compilation of data in respect of the water resource of the State of Victoria; for investigation and engineering research generally including compute usage in connexion therewith.	Š e ,	4 500 000
	9	Works Generally—Workshops, Storesheds Administrative and Other Buildings  This sub-item provides for the purchase, acquisition erection, enlargement, renovations, alteration and improvements of and additions to administrative buildings for testing and research purposes and other buildings. Also included is the equipping, fitting furnishing and all other expenses incidental to the transfer to and establishment of any new building. The buildings in this sub-item are those outside the areas specifically referred to in the preceding sub-item under Items 1 and 2.	250 000	400 000
	io.	Diversions and Groundwater—Meter Installations .	. 30 000	50 00
		This sub-item provides authority for the supply an installation of water meters, stream gauging stations structures and telemetry necessary for prope supervision, recording and control of usage of water by private diverters located outside district boundaries.  Authority is also included in this sub-item for expenditure on the metering of groundwater supplie extracted under licences issued by the Commission is accordance with the provisions of the Groundwate Act 1969. The metering of supplies is necessary to obtain details of quantities extracted, control of usage in the event of a restriction being imposed and for assessment of groundwater resources and water us requirements.	r r r s n r o o e	

Item		Details	Proposed Expenditure during 1980–81 Financial Year	Proposed Provision in Bill
2	Sub- item	OTHER STATE WORKS—continued		
7		,	\$	\$
	11	Computing Facilities  Authority is sought under this sub-item for expenditure on the supply and installation of equipment to augment the Commission's in-house computer system Installation of the system has substantially reduced the use of hired time-sharing facilities and specialized	<b>t</b> • ************************************	100 000
		technical computing facilities supplied by the State E.D.P. Centre.	•	
	12	Flood Plain Management	450 000	800 000
		designed for the management of flood flows within flood plains authorized under the <i>Drainage of Land Act</i> 1975. Such works include the upgrading of existing levees and the construction of levees at retarding basins. Costs of some flood plain management works are being shared between Victoria the Commonwealth and local municipalities. Priority areas are Sale, Seaspray, Nathalia, Kerang, Nhill and Lough Calvert. It is also planned to purchase flood prone urban lots, initially at Echuca, and rural lands a Lough Calvert.		
		Also included under this sub-item is expenditure by the Commission on flood plain investigations and studies and employment of consultants to carry our special studies at Seaspray, Sale, Geelong, Wangaratta Shepparton-Mooroopna and the lower Loddon area The Commonwealth Government has provided a contribution of \$700 000 for flood plain works and studies under the National Water Resources Programme		
	13	Water Supply Stores Suspense Account  This sub-item provides authority to enable the Commission to augment the amount available in the Water Supply Stores Suspense Account for the purchase in bulk of fuel, stores and equipment pending their use and consumption on, or hire to, authorized works		200 000
		Total Item 2	17 245 000	25 800 000
		Grand Total State Works.	23 530 000	37, 300 000

### CLAUSE 5-PLANT AND MACHINERY

The amount of \$150 000 included in the Table to Clause 5 of the Bill is required to cover the cost of purchase of movable plant and machinery by the State Rivers and Water Supply Commission for use on construction and maintenance works. \$100 000 has been allocated for expenditure in 1980–81.

### Clauses 6 to 9—Waterworks Trusts and Local Governing Bodies

The amount of \$6 500 000 included in the Tables to Clauses 6 to 9 represents provision for expenditure by at least 23 locally controlled centres on investigations, construction of new town water supply systems and improvements and extensions of existing water supply systems.

The proposed expenditure on approved works by these authorities during 1980–81 is \$3 200 000. In no case does the Treasurer of Victoria advance a loan to a waterworks trust or local governing body until the proposal has been examined by the State Rivers and Water Supply Commission. At 30 June 1980, 204 local authorities had been formed to serve 346 cities and towns outside the metropolitan area.

With the object of assisting local urban authorities to establish and extend local water supply works, the Governor in Council is authorized, on the recommendation of the Minister of Water Supply, to determine what part of the amount advanced shall be transferred from the debit of the respective authorities to the State, the amount to be transferred being determined in accordance with a formula applying generally to country town supplies.

To augment the amount of Government money being provided there has been a continued increase in the private borrowing programme for expenditure on works of water supply by local authorities. In 1966–67 the amount of private borrowing so obtained was \$68 000 and this has increased to \$10 200 000 in 1980–81. Private borrowing does not increase interest rates to be met by local authorities as the Government subsidizes the interest rates on such borrowing back to 3 per cent per annum. Interest subsidies paid to local water authorities since 1953–54 total \$11 990 480. The actual subsidy paid in 1979–80 was \$2 796 534.

New town supplies constructed by local authorities began operating in eight townships during the 1979–80 financial year at Caramut, Coronet Bay, Cowwarr, Myrniong, Nyora, Shelford, Waubra and Wunghnu. Existing local authorities continued the construction of new town supplies at Aireys Inlet, Fairhaven, Porepunkah and Tallarook. Construction of new town supplies commenced at Bemm River, Gordon, Mount Egerton and Nowa Nowa.

As part of the programme for augmenting the town water supply to Euroa the construction of a 250-megalitre capacity storage, situated on Mountain Hut Creek, was completed late in 1979 at a total cost of \$1.2 million. Substantial progress has been made on the construction of a 360-megalitre reservoir on Johns Hill at an estimated cost of \$932,000 to augment the Gembrook, Cockatoo and Emerald water supply. Construction is well advanced on the Leongatha Waterworks Trust's No. 4 Reservoir located on Ruby Creek. This storage when completed will have a capacity of 1136 megalitres and is estimated to cost \$700,000. Work has also commenced on the first stage of construction of the West Portland trunk

main. The overall project involves the installation of 5307 metres of 525-mm diameter pipeline at an estimated cost of \$708 000. Other major projects in progress include construction of a 26-km long, 600-mm diameter rising main and pumping station on the Mitchell River to augment the supply of water to Bairnsdale, at an estimated cost of \$3.35 million; and construction of a pipeline and pumping facilities on the Tanjil River to augment the town water supply system of the Moe Waterworks Trust at an estimated cost of \$1.5 million.

The quality of water supplied by local authorities is continually being improved and the number of townships which receive a fully treated water supply has increased from 5 in 1954 to 52 by June 1980. Water treatment plants are under construction at Cobram, Maryborough and Traralgon.

The eleven authorities listed in the Table to clause 9 are those with new water supplies where construction has commenced or been authorized to commence or existing authorities undertaking augmentation works, and where in addition to the assistance provided by way of interest subsidies and capital grants under the formula already mentioned, special additional assistance will be provided to ensure that the rate in each case need not be greater than 17.5 cents in the dollar of net annual valuation. This additional assistance will be provided by deferring portion of an authority's loan liability. The amount of liability to be charged to the "Capital Expenditure Borne by the State Account" in each case will be determined by the Governor in Council on the recommendation of the Minister of Water Supply. The amounts of deferred liability will be reviewed each year and adjusted by the Governor in Council for each authority as development occurs and enables the authority to carry a larger proportion of its loan liability with the maximum rate. Provision is made within Item 12 of the Table to clause 9 for new town supplies which might be approved for either existing or proposed authorities and for existing authorities where deferred capital might be approved.

#### CLAUSE 10—GEELONG WATERWORKS AND SEWERAGE TRUST

The amount of \$150 000 included under Item 1 of the Table to clause 10 of the Bill represents provision for advances to be made to the Geelong Waterworks and Sewerage Trust towards the capital cost of works of water supply.

The amount of \$750 000 included under Item 2 of the Table to clause 10 of the Bill represents provision for advances to be made to the Geelong Waterworks and Sewerage Trust towards the capital cost of a new sewerage scheme at Lara, estimated to cost \$1.8 million.

Amounts so advanced shall be charged to the "Capital Expenditure Borne by the State Account" in each year and shall not be debited to the Trust.

#### CLAUSE 11—SEWERAGE AUTHORITIES

The amount of \$3 000 000 included in the Table to clause 11 of the Bill represents provision towards the cost of sewerage works to at least twelve authorities in country centres. The proposed expenditure on approved works by these authorities during 1980–81 is \$1 800 000.

With the object of assisting sewerage authorities to establish and extend country sewerage works, the Governor in Council is authorized, on the

recommendation of the Minister of Water Supply, to determine what part of the amount advanced shall be transferred from the debit of the respective sewerage authorities to the State, the amount to be transferred being determined in accordance with a formula having general application throughout the State.

The amount of \$1 800 000 provided to sewerage authorities for 1980–81 will be applied principally as interest-free grants and interest-free advances.

In addition to these Government grants and advances, which this year are expected to form only a portion of the expenditure for sewerage authorities, a programme of private borrowing amounting to \$20 500 000 has been approved. Since 1943, the Government has paid subsidies to sewerage authorities in respect of interest charges in excess of 3 per cent per annum. The subsidy paid on behalf of sewerage authorities in 1979–80 was \$8 479 503 and this annual subsidy is estimated to increase by approximately \$1 720 000 for 1980–81. Total interest subsidy payments since 1943 now amount to \$50 779 612, of which \$50 579 612 has been paid since 1955.

New sewerage authorities were constituted for Chiltern, Mallacoota, Paynesville (for the townships of Paynesville, Eagle Point and Raymond Island), Upper Yarra (for the townships of Millgrove, Warburton, Wesburn, Woori Yallock and Yarra Junction) and Yackandandah. There are now 137 sewerage authorities throughout Victorian country areas in addition to the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board. All these authorities operate under the general supervision of the State Rivers and Water Supply Commission which itself operates the Eildon Sewerage District. These authorities have been formed to provide sewerage services to a total of 175 towns.

Two new sewerage schemes at Cobden and Yea were completed during 1979-80. There are now 129 towns with sewerage systems complete or in part operation outside of the Melbourne and metropolitan systems.

New schemes are under construction at Cowes, Creswick, Hastings, Heathcote, Heyfield, Hurstbridge, Koo-wee-rup, Melton, Romsey, Tongala, Winchelsea and Yinnar.

#### CLAUSE 12-RIVER IMPROVEMENT TRUSTS

The amount of \$1 500 000 included in the Table to clause 12 of the Bill is required to implement the provisions of the River Improvement Act 1958 which empowers the Treasurer of Victoria to make advances by way of loan to river improvement and drainage authorities for the purposes of undertaking river improvement and land drainage works. No advance is made for these purposes until each proposal has been examined by the State Rivers and Water Supply Commission. The allocation of funds for reimbursement of actual expenditure during 1980–81 on planned works by these authorities is \$900 000. Thirty-two trusts are now operating, and formation of additional trusts are being considered.

In view of the national importance of these works the Governor in Council is authorized, on the recommendation of the Minister of Water Supply, to determine what part of the amounts advanced shall be transferred from the debit of any local authority to the State.

River improvement trusts have been formed with the principal objective of achieving a reasonable balance between the stable carrying capacities of streams and the protection or enhancement of their associated wetlands and frontages. Drainage trusts have been formed to undertake and manage essential works of land drainage to maintain the productivity of existing development.

## Clause 13—Dandenong Valley Authority

The amount of \$1 100 000 included in the Table to clause 13 of the Bill represents the provision for grants to the Dandenong Valley Authority in respect of stream conservation and drainage works.

The Authority's works are financed by private borrowings and grants, the Government having agreed to provide \$700 000 in 1980-81. The basis of subsidies towards stream conservation and drainage works and towards the purchase of land required for flood retention basins has been approved by the Government. Approval has been granted for private borrowing by the Authority amounting to \$1 200 000 for 1980-81.

#### CLAUSE 14-Waste Water Treatment and Other Studies

The amount of \$150 000 included under Item 1 of the Table to clause 14 represents provision for expenditure by the Ministry of Water Resources and Water Supply and other government and semi-government bodies on the development and comparison of methods of advanced waste water treatment. The study also includes the detection and limitations of public health dangers in situations where wastewater is re-used and the education of the general public and development of markets for re-use of wastewater. \$110 000 has been provided for this purpose in 1980-81.

The amount of \$500 000 included under Item 2 of the Table to clause 14 represents provision for expenditure by the Ministry of Water Resources and Water Supply and other government and semi-government bodies on other studies and research projects. The major study being undertaken is a result of government adoption of sewerage strategy for the Yarra Valley, using Lilydale as an appropriate area. Nutrient removal processes are being studied at Lilydale Sewerage Authority's treatment plant. The cost of the study is estimated at \$220 000, \$180 000 being provided for 1980-81. Other studies include continuation of a review of Victoria's water resources and their utilization; an investigation of the financing of urban water supplies and sewerage services in Victoria; a study of options and development of proposals for treatment of household wastes in situations where present waste treatment practices are unsatisfactory; and research projects for the Water Resources Council. A total of \$150,000 has been allocated for these other studies in 1980-81.

#### CLAUSE 15-RIVER MURRAY WORKS

The amount of \$3 400 000 included in the Table to clause 15 of the Bill represents provision for the contribution by the State of Victoria towards the cost of works constructed under agreements ratified by the River Murray Waters Act. The River Murray Agreements prescribe that the contacting governments shall each contribute one-fourth of the total aggregate capital expenditure.

As the River Murray Works are national works, the amount of the State contribution will be charged to the "Capital Expenditure Borne by the State Account".

The amount of \$1 000 000 included in Item 1 is required as authority for contributions by the State of Victoria towards the cost of the Dartmouth Dam Project.

Legislation authorizing work to start on the Dartmouth Dam was jointly proclaimed by the States and the Commonwealth. Under the terms of the legislation, costs of the scheme are shared equally between the Commonwealth, New South Wales, South Australia and Victoria. However, one-half of the States' contribution was met by a special loan from the Commonwealth with repayments commencing at the expiry of ten years from the date of payment by the Commonwealth. The agreement with the Commonwealth to provide the half share by way of a special loan was limited to expenditure up to \$70.4 million. The revised estimated cost of the dam is \$139 million of which \$137.7 million has been expended to 30 June 1980.

The Works and Services Programme for the 1980–81 financial year includes \$850 000 as provision for contributions to the River Murray Commission towards the cost of the project, which will be completed this financial year.

The sum of \$2,400,000 has been included in Item 2 of the Table for works other than the Dartmouth Dam Project, towards which the State of Victoria is required to contribute under the River Murray Agreements. Expenditure during 1980-81 is estimated at \$1,630,000.

#### CLAUSE 16—Melbourne and Metropolitan Board of Works

Rapid population growth which has occurred in the Narre Warren, Berwick and Beaconsfield area has brought about the need for a reticulated sewerage system. Investigations have shown that the Melbourne and Metropolitan Board of Works would be the most appropriate body to construct and manage the necessary works, subject to the Board receiving the same level of assistance as would be available to a local authority. The area was included in the metropolis, for sewerage purposes only, by Order in Council on 24 December 1975. The amount of \$400 000 included in Item 1 of the Table represents provision for payment of portion of the capital assistance.

In addition, provision of \$400 000 is made in Item 2 of the Table for capital grants to the Melbourne and Metropolitan Board of Works for approved works of water supply. Payments proposed for 1980–81 include \$85 000 being the balance of grant due to the Board for remodelling Stony Creek between Hyde Street and the railway line and a grant of \$215 000, towards the estimated government contribution of \$700 000, for construction of a water supply pipeline from the Silvan–Monbulk Road pumped system to developing areas around Silvan.

#### CLAUSE 17—Approved Works Pending Reimbursement by Landholders

The amount of \$700 000 included in the Table to clause 17 of the Bill represents provision for initial expenditure incurred by the Commission in financing

certain water supply works carried out under the provisions of the Local Government (Subdivision of Land) Act 1973. Expenditure on these works is repayable by the landholders concerned.

The amount of \$500 000 has been provided for these purposes in 1980-81.