WATER SUPPLY WORKS AND SERVICES BILL 1977.

EXPLANATORY MEMORANDUM.

This Bill is to give Parliamentary authority for the expenditure of \$70,000,000 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.

Expenditure authorized in previous Acts, and actual expenditure in recent years are set out hereunder:—

	Previous Ac.	ts.		Actual Expenditure.	
			\$	•	\$
1971	 No. 8215		30,000,000	Financial Year 1971–72	8,632,985
1972	 No. 8362		30,000,000	Financial Year 1972-73 1'	7,990,430
1973	 No. 8498		31,500,000	Financial Year 1973-74	9,690,813
1974	 No. 8629		39,000,000	Financial Year 1974–75 2.	5,829,571
1975	 No. 8825		49,000,000	Financial Year 1975–76 3.	3,037,585
1976	 No. 8905		57,000,000	Financial Year 1976–77 4	4,649,983
1977	 Present Bill		70,000,000	Amount Allotted 1977–78 4	7,750,000

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 \$39,000,000 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 \$26,805,000 is planned for expenditure during the 1977-78 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 1977-78 financial year.	Proposed Provision in Bill.
1	Sub- Item.	STATE WORKS—STORAGES AND HEADWORKS.	\$	\$
	1	Tarago—Westernport Pipeline The accelerated urban growth in the Mornington Peninsula and industrial development in the Westernport area has made necessary the construction of additional conveyance capacity. This is being achieved by the construction of a 1050 mm steel pipeline between the Tarago Reservoir and Tyabb. The revised estimated cost of the project is \$19·1 million and expenditure to the end of last financial year amounted to \$17,962,000 from the Works and Services Account supplemented by \$100,000 from Commonwealth Employment Grant in 1974–75.	860,000	1,000,000

Item.		Details.	Proposed Expenditure during 1977-78 financial year.	Proposed Provision in Bill.
1	Sub- Item.	STATE WORKS—STORAGES AND HEADWORKS—continued.	S	\$
	2	Lang Lang River Works	180,000	250,000
	3	Other Storages and Headworks Provision is made under this sub-item to meet the cost of improvement to be carried out on storages, headworks and main channels including camping, picnic and recreational facilities and conveniences at Storages. Principal projects for this financial year include continuation of improvement works on the Warnaga Western Channel and the provision of additional housing for reservoir keepers.	805,000	1,000,000
	4	Millewa Pipelines Project This project involved the replacement of the earthen channel distribution system supplying stock and domestic needs throughout the Millewa Rural District by a new pipeline scheme and resulted in greatly improved distributory efficiency, reduction in water losses and a greatly reduced cost of operation. Only minor works remain to be completed.	15,000	50,000
	5	Lake Merrimu Project The first stage of the Lake Merrimu Project comprised a dam on the Coimadai Creek and a tunnel to divert the waters of Goodman's Creek into the new storage. This scheme makes available a reserve supply for the Bacchus Marsh and Werribee Irrigation Districts as well as the growing urban area at Melton and provides for expected urban and industrial development in the area immediately west of the metropolis. The second stage will further supplement supplies to the Storage and involves the construction of a small diversion weir on the Lerderderg River and a tunnel between the river and Goodman's Creek. Stage 2 is estimated to cost \$9.6 million and should be completed during 1977–78. The third stage of the Project involves raising the height of the dam to provide the additional capacity to utilize the additional water supplies gained from the first two Stages. Stage 3 estimated to cost \$8 million will be commenced in 1978–79.	2,850,000	5,000,000
		Total Item 1	4,710,000	7,300,000
2		OTHER STATE WORKS	\$	\$
	1	Irrigation Districts	5,510,000 (1,700,000)	7,200,000 (2,500,000)
		(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 and the provision of housing for new water bailiffs. The amount of \$2,960,000 provided for expenditure in 1977-78 includes \$1,200,000 for expenditure on irrigation and drainage works in the Goulburn-Murray Irrigation District and \$550,000 for provision of housing for additional water bailiffs.	(2,960,000)	(3,500,000)

Item.		Details.	Proposed Expenditure during 1977-78 financial year.	Proposed Provision in Bill.
2	Sub- Item.	OTHER STATE WORKS—continued.	S	\$
		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 \$330,000 on these works in 1977–78. (c) Drainage in Irrigation Areas	(850,000)	(1,200,000)
	2	Coliban System The provision under this sub-item is sought for improvements, enlargements and extensions of water supply channels and mains and reticulation works. Principal projects to be undertaken this financial year are improvements to water supplies at Spring Gully \$425,000 and White Hills \$315,000. The sum of \$390,000 has been allocated for reticulation replacements and extensions during 1977–78.	1,550,000	2,200,000
	3	Mornington System Continued urban and industrial development has resulted in a rapid increase in demand for water. A major programme of installation, enlargement and extension of main supply works, pipelines and 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 the Tyabb-Mornington Pipeline which will supply the Mornington and Mt. Martha area. An amount of \$2·1 million has been allocated for construction of the pipeline which is estimated to cost \$4·1 million. Construction of the Tyabb Storage, estimated to cost \$1·8 million, will be continued this financial year with an allocation of \$459,000. Works will be continued in 1977–78 on Water Supply Schemes at Upper Beaconsfield \$162,000 and Pakenham \$547,000 and \$805,000 will be spent on augmentation of the water supply to the Dromana-Portsea area. An amount of \$575,000 will be expended during 1977–78 on the acquisition of land required for the future enlargement of Devilbend Reservoir. Also included in the programme for land acquisition is \$596,000 for purchase of storage basin sites at 'East Frankston and Rosebud and \$200,000 for land required for the Tyabb-Mornington Pipeline. \$1,060,000 will be expended in 1977–78 on distribution and reticulation works at Balnarring, Carrum Downs, Mornington and Narre Warren North; \$450,000 on general reticulation improvements to meet normal housing development and \$184,000 on metering.	7,920,000	12,000,000
	4	Bellarine Peninsula System	900,000	1,600,000
	5	Otway System This sub-item provides for enlargement of headworks and improvements to storages, service basins and distributory and reticulation works. An allocation of \$105,000 has been provided in 1977–78 for improvement works on the Otway Main Pipeline. Reticulation improvements to be carried out during 1977–78 are estimated to cost \$35,000. \$49,000 has been provided for metering and \$29,000 for cathodic protection.	300,000	500,000

Item.		Details.		Proposed Provision in Bill.
2	Sub- Item.			\$
	6	Waterworks Districts, Generally Works for which authority is sought include the extension and enlargement of channels and pipelines, the construction of urban storages and improvements to urban and rural supply works within Waterworks Districts, principally in the extensive Wimmera Mallee System. This sub-item also provides for further works on the reticulation systems in the Wonthaggi and Newstead Urban Districts where estimated expenditure for 1977–78 is \$80,000.	760,000	1,200,000
	7	Flood Protection Districts	160,000	250,000
	8	Surveys, Investigations, Designs and Research Authority is required for expenditure on surveys, designs, investigations, environmental and hydrological studies in connection with further projects; for the compilation of data in respect of the water resources of the State of Victoria; for investigation and engineering research generally including computer usage in connection therewith.	2,490,000	3,500,000
	9	Works Generally—Workshops, Storesheds, Administrative and Other Buildings This sub-item provides for the purchase, acquisition, erection, enlargement, extension, remodelling, renovation, alteration and improvement 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. Construction of extensions to the Commission's Head Office building in Armadale has commenced and will involve expenditure of \$1.5 million in 1977–78. The estimated total cost is \$2 million. These extensions are required to alleviate accommodation problems which have arisen within the present building.	2,045,000	2,500,000
	10	Private Diversions—Meter Installations The Commission has embarked upon a programme of installation of water meters to record and control usage of water by private diverters located outside district boundaries. These measures have resulted in greatly improved regulation of supplies used by these diverters.	57,000	100,000
	11	Computing Facilities Authority is sought under this sub-item for expenditure on the supply and installation of an in-house computer system, estimated to cost \$350,000. Installation of this system will substantially reduce the use by the Commission of hired time sharing facilities and specialized technical computing facilities supplied by the State E.D.P. Centre.	300,000	400,000
	12	Groundwater Meter Installations This sub-item provides authority for expenditure on the metering of groundwater supplies extracted under licences issued by the Commission in accordance with the provisions of the <i>Groundwater Act</i> 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 the assessment of groundwater resources and water use requirements.	3,000	50,000

Item.		Details.	Proposed Expenditure during 1977-78 financial year.	Proposed Provision in Bill.
2	Sub- Item.	Other State Works—continued.	\$	\$
	13	Water Supply Stores Suspense Account This sub-item was inserted 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. Continued rising prices have necessitated an increase of \$100,000 in 1977–78.	100,000	200,000
		Total Item 2	22,095,000	31,700,000
		Grand Total State Works	26,805,000	39,000,000

CLAUSE 5—PLANT AND MACHINERY.

The amount of \$200,000 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 1977–78.

CLAUSES 6 TO 9—WATERWORKS TRUSTS AND LOCAL GOVERNING BODIES.

The amount of \$8,700,000 included in the Tables to Clauses 6 to 9 represents provision of expenditure to at least 92 locally controlled centres, on investigations, improvements and extensions of the respective town water supply systems.

The amount of expenditure on planned works proposed during 1977–78 by these authorities is \$4,400,000. 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 30th June, 1977, 210 local authorities had been formed to serve 327 cities and towns.

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.

A feature of the expenditure on works for water supply by local authorities has been the continued increase in the private borrowing programme by these authorities to augment the amount of Government money being provided.

In 1966-67 the amount of private borrowing so obtained was \$68,000 and this has increased to 6,490,000 in 1976-77. It is expected that private borrowing for 1977-78 will be around $7\cdot2$ million.

Private borrowing does not increase the interest rates to be met by local authorities as the Government meets all costs in excess of 3 per cent. per annum. Interest subsidies paid to local water authorities since 1953–54 total \$4,861,954. The actual subsidy paid in 1976–77 was \$1,394,153.

New town supplies constructed by local authorities began operating in five towns during the 1976-77 financial year at Boisdale, Diggers Rest, Dookie, Skenes Creek and Wickliffe.

Existing local authorities continued the construction of new town supplies at Aireys Inlet, Fairhaven, Inverleigh, Teesdale, Poowong, Loch, Nyora and Merino.

The Warrnambool Shire Council has been constituted as a Local Governing Body to construct works to serve the township of Caramut.

The City of Warrnambool has extended its water supply boundary to include developing urban areas located in the neighbouring Shire of Warrnambool and water supply services have now been extended to serve development in most of these areas.

Approval has been given to the Horsham Waterworks Trusts to replace its main supply line with 15 km of 675 mm diameter concrete lined steel pipeline at a total estimated cost of \$1.5 million to augment supply to the City. The first stage costing some \$357,000 was completed during 1976–77 and additional stages will be undertaken as funds become available.

Construction of the Nicholson River Dam which will provide a storage with a capacity of 636 Ml was completed by the Lakes Entrance Waterworks Turst at a cost of \$1.3 million to meet the rapidly increasing demands for water throughout the various areas served by the system.

Many local authorities are improving the quality of the water delivered to their consumers and the number of Townships which receive a fully treated water supply has increased from five in 1954 to 47 by June, 1977. Treatment works commenced operating at Korumburra, Mirboo North and Yarrawonga during 1976–77 financial year. Works have commenced on the first stages of construction of water treatment plants at Hurstbridge and Maryborough while designs are well advanced for treatment plants at Cobram, Traralgon and Warracknabeal.

The twenty authorities listed in the Table to Clause 9 are those with new water supplies where construction has commenced or has 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 21 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 \$200,000 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 cost of works to provide sewerage facilities to Leopold.

The amount of \$500,000 included under Item 2 of the Table to Clause 10 of the Bill represents provision for advances to be made to the Geelong Waterworks Trust towards the capital cost of works of water supply to Lara and Moriac and other approved works.

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 \$4,000,000 included in the Table to Clause 11 of the Bill represents provisions for advances towards the cost of sewerage works to at least twelve authorities in country centres. The amount of expenditure during 1977–78 on planned works by the authorities is \$2,539,000.

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 and in these cases also, the amount so transferred is determined in accordance with a formula having general application throughout the State.

The amount of \$2,539,000 provided to sewerage authorities for 1977–78 will be applied principally as interest free grants and interest free advances.

In addition to these Government Grants which this year are expected to form only a portion of the expenditure for sewerage authorities, a programme of private borrowing amounting to \$21,800,000 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 1976–77 was \$4,896,851 and this annual subsidy is increasing by approximately \$800,000 each year. Total interest subsidy payments since 1943 to sewerage authorities now amount to \$29,010,420, of which \$28,810,420 has been paid since 1955.

New sewerage authorities were constituted for Halls Gap, Heathcote, Portarlington (including Indented Head and St. Leonards) and the Shire of Rutherglen (for Rutherglen and Wahgunyah). There are now 127 Sewerage Authorities throughout country Victoria including the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board. All these authorities operate under the general supervision of the Commission which itself operates the Eildon System.

During the year ended 30th June, 1977, three new sewerage schemes at Lakes Entrance, Pakenham and Rainbow commenced operation bringing the total number of sewerage systems either completed or in part operation to 104.

New schemes are under construction in Bellbridge, Cobden, Cowes, Edenhope, Hastings, Inverloch, Melton, Nagambie, Romsey, Sunbury, Tongala and Yea, whilst Authorities have been constituted to construct and manage works in a further eleven towns.

Major extensions were undertaken during the year in Ballarat, Camperdown, Cranbourne, Dandenong, Dromana-Rosebud, Frankston, Kyneton, Lilydale, Mornington, Shepparton, Springvale-Noble Park and Wodonga. New treatment plants are under construction at Cobden, Lakes Entrance, Melton, Mornington, Pakenham, Sunbury and Swan Hill.

CLAUSE 12—RIVER IMPROVEMENT TRUSTS.

The amount of \$1,750,000 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 Commission. The allocation of funds for reimbursement of actual expenditure during 1977–78 on planned work by these authorities is \$1,000,000. Thirty one 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 principle 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 \$1,000,000 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 borrowing and grants, the Government having agreed to provide \$725,000 in 1977–78. 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 \$1,000,000 for 1977–78.

As from August 1977, the district of the Authority has been extended to incorporate portion of the Cardinia-Toomuc and Deep Creek catchments. A grant of \$150,000 has been provided for 1977-78 to enable commencement of major stream improvement, drainage and gauging works within this new area.

The Authority is continuing the programme of improvements to the condition and carrying capacity of Mordialloc Creek, estimated to cost \$750,000. \$270,000 has been provided for this purpose in 1977–78.

A special grant of \$50,000 has been provided for 1977–78 to enable works to be commenced on the preservation of a buffer area around the Edithvale Wetlands. This project is being undertaken in conjunction with the Fisheries and Wildlife Division of the Ministry for Conservation.

CLAUSE 14—WASTE WATER TREATMENT STUDY.

The amount of \$200,000 included in the Table to Clause 14 of the Bill represents provision for expenditure by the Commission 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 waste water is re-used and the education of the general public and development of markets for re-use of waste water.

The amount of \$100,000 has been provided for these purposes in 1977-78.

CLAUSE 15—RIVER MURRAY WORKS.

The amount of \$10,000,000 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 Acts. The River Murray Agreement prescribes that the contracting 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 \$8,000,000 included in Item 1 is required as authority for contributions by the State of Victoria towards the cost of the Dartmouth Dam Project.

The Dartmouth Dam, on the Mitta River in north-eastern Victoria is being constructed for the River Murray Commission by the State Rivers and Water Supply Commission of Victoria, with the Snowy Mountains Engineering Corporation acting as design consultants. The dam, planned to be completed in the 1978–79 financial year, will impound a storage volume of 4 million megalitres and when full will supply each of the States with additional water for irrigation, city and town supplies, including water for Adelaide. Provision is included in the project for hydro-electric power development by the State Electricity Commission of Victoria, which proposes to install a single turbo-generator of 150 megawatt capacity.

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 South Australia, Victoria, New South Wales and the Commonwealth. However, one-half of the States' contribution was met from 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 Government to provide the half share by way of special loan was limited to expenditure up to the amount of \$70.4 million. The revised estimated cost of the dam is \$119 million, of which \$83.9 million has been expended to 30th June, 1977.

The Works and Services Programme for the 1977–78 financial year includes \$8,000,000 as provision for contributions to the River Murray Commission towards the cost of the project.

The sum of \$2,000,000 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 1977–78 is estimated at \$1,500,000.

CLAUSE 16—ROYAL SHOW EXHIBIT.

The amount of \$50,000 included in the Table to Clause 16 of the Bill represents provision for the cost of an exhibit at the Royal Agricultural Showgrounds, Melbourne, for the purpose of preparing and providing information relating to the proper utilization of water as applied to agriculture and the rural economy of the State of Victoria.

Amounts so expended shall be charged to the "Capital Expenditure Borne by the State Account". The amount of \$25,000 has been provided for this purpose in 1977-78.

CLAUSE 17—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 24th December, 1975.

The amount of \$600,000 included in Item 1 represents provision for payment of portion of the capital assistance.

In addition, provision of \$2,000,000 is made in Item 2 for capital grants to the Melbourne and Metropolitan Board of Works for approved works of water supply.

CLAUSE 18—APPROVED WORKS PENDING REIMBURSEMENT BY LANDHOLDERS.

The amount of \$1,100,000 included in the Table to Clause 18 of the Bill represents provision for initial expenditure incurred by the Commission in financing certain water supply works carried out under the 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 1977–78.

Clause 19—Latrobe Valley Works.

The amount of \$700,000 included in the Table to Clause 19 of the Bill represents provision for expenditure by the Latrobe Valley Water and Sewerage Board on the replacement of the Dutson outfall sewer channel, between Longford Storage and Longford, with a pipeline.

The Premier has approved a special grant of \$650,000 to be made available towards the cost of these works. The amount provided for expenditure during 1977–78 is \$300,000.