# First Mildura Irrigation Trust Water Plan

2008 / 2013

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## 1. Executive Summary

The Water Plan preparation for the 5-year regulatory period commencing 1st July 2008 has presented some challenges for water authorities. Preparation has been timed during a time of significant water reform, with some reform still in formulation by regulatory bodies. In addition there is no clear method of reliably forecasting water availability, with continuing below average rainfall at the time of preparation.

FMIT is approaching the end of a period of major investment in infrastructure, Consequently this 5-year plan covers a period of relatively low capital expenditure.

Operating expenditure forecasts projects a moderate annual increase when compared with historical costs. Significant is the increase in wholesale electricity costs.

To further insulate the FMIT from the impact of fluctuating water allocations during an uncertain period, the current approach to tariff setting has continued, particularly the major proportion of revenue derived from fixed charges which is intended to assist in meeting the fixed overheads.

FMIT has taken a cautious approach to forecasting seasonal allocations with a staged return to 100% allocations over the first three years of the period and an estimated 1% pa decline in demand due to on-farm efficiencies, urban encroachment and crop abandonment.

The outlook for tariff increases during the period is for a moderate increase during the first two years of the period, followed by increases approximating CPI in the remaining three years. This reflects the introduction on the Regulatory Asset Value method of recovering the cost of renewals.

## 2. Outcomes for the current regulatory period

The first year of a two-year regulatory period for rural water authorities is now complete. The following comments address not only aspects of FMIT's performance during the first year, but also expected outcomes for the full period. FMIT has achieved, or expects to achieve a number of significant service outcomes during the first regulatory period. All of these objectives are met within existing FMIT staff levels and within its normal activities.

#### 2.1 Service Standards and other outcomes

A number of initiatives were identified in FMIT's Water Plan for the first regulatory period.

#### 2.1.1. Determining Water Savings

An independent assessment of historical water savings has been completed and a written request for its validation by the Department of Sustainability and Environment has been lodged. Savings once recognised will be available for water trade. Further assessments, particularly that of savings to be realised by the rehabilitation of the Mildura South Sub-System, will be undertaken during the second year of the regulatory period. This development is subject to the progress of the earlier water savings application to the Department. Preliminary measurement of water use prior to implementation of the upgraded systems has continued through 2006/2007 by NATA accredited consultants. This will enable a verifiable assessment of savings following implementation.

#### 2.1.2. Asset Management

An independent assessment was conducted by Pitcher Partners Consulting Pty Ltd to determine a suitable approach to the upgrade of FMIT's MapInfo database to enable FMIT to reach the required level of compliance with its asset management system.

During the second year of the regulatory period proposed strategies will be implemented with a view to compliance by June 2008.

#### **2.1.3.** *Site Safety*

A number of safety issues were identified or addressed during this period, these include:

- All telemetry bridges are scheduled to or have been upgraded to comply with the Australian Standards Code.
- Signage around storage facilities and channels is scheduled to be upgraded. FMIT will consult with neighbouring water authorities to determine the appropriateness of uniform signage for channel safety.
- An Amco road safety rail was installed at the southern corner of the Benetook Water Storage as a risk minimisation measure.

#### 2.1.4. Garden Metering Program

The metering program for garden supplies is now complete with all 1016 garden supply outlets now metered. This initiative has been funded by ratepayers, with many taking advantage of a 12-month instalment option.

#### 2.1.5. Introduction of the Auxiliary Supply connection

This service has enabled irrigators to take a limited water flow without the need to schedule water delivery. It is of benefit to customers for use in filling spray vats and wash bay facilities for traditional on farm requirements outside normal irrigation use. A nominal fee applies for an auxiliary connection. This service option has been well received by customers.

#### 2.1.6. Conversion of "maintenance land" water for irrigation use

As a part of the Victorian Water Register reform, FMIT successfully negotiated on behalf of its ratepayers, to arrange apportionment of "maintenance" water entitlements to water share. Conversion was achieved immediately prior to unbundling on 30<sup>th</sup> June 2007. This is a significant bonus for FMIT irrigators, making this additional water available to its customers for irrigation or trade.

## **2.1.7.** Assistance to irrigators to find other sources of income, payment options and managing outstanding debtors

FMIT was able to offer assistance to customers experiencing hardship in realising funds from surplus water held by the customer. This is a positive outcome which assisted customers in meeting their financial obligations. Additionally the Trust entered into an agreement with Acreis Australia to offer its services as a third party payment option to customers.

FMIT continues to make progress in its revenue collection through mutually agreed payment arrangements with customers. A cooperative approach with customers has achieved improvement in the Trust's collection rate despite a period of economic downturn. FMIT works closely with Sunraysia counselling service, and has made a sponsorship contribution to this free service which is offered to its customers.

## 2.1.8. Mapping information

FMIT are able to offer property data services to customers through its Geographic Information System (GIS) mapping capabilities which holds extensive information of property overlay features. Information is offered at no cost to customers, identifying building structures, planting types, easements, and FMIT's infrastructure locations.

#### 2.1.9. Annual Growers meeting

FMIT have a history of customer involvement through public meetings on current major issues. An additional formal meeting has been scheduled to occur in April/May each year. The specific aims of this annual meeting include:

- Informing customers of progress in major initiatives and work programs.
- Providing an update on water availability and allocation matters.
- Discussing pricing recommendations for the coming season prior to submission of tariffs to ESC.
- Providing an opportunity for customers to raise service issues.
- Identifying issues to be dealt with at the subsequent Annual General Meeting held in September/October, and
- Reporting on matters arising from the previous Annual General Meeting.

#### 2.1.10. Environmental Outcomes

- Kings Billabong conservation continued cooperation with the "Friends of Kings Billabong" a group promoting the conservation of this haven for bird life. FMIT maintains water levels to sustain a consistent environment for bird species.
- Water Re-use at Mildura Waste Management site Partnership with Mildura Rural City Council, supplying drainage water for use in dust control at the Mildura Waste Facility

Lake Hawthorn water quality – Delivery of environmental water to this
major drainage basin, to assist the survival of the Murray Hardy Head.
This has included the installation of a high-pressure outlet providing
water from FMIT's new Mildura South system.

Each of these initiatives has progressed as expected, and remain as ongoing initiatives to be funded from FMIT's operating costs extending into the new regulatory period

#### **2.1.11.** *Information Systems*

A further improvement to the water ordering and billing system was completed in July 2006. This has seen the expansion of our web-based information system for the benefit of irrigation users. Customers are able to view historical usage volumes for their properties and ascertain remaining available water for the current year, as well as calculate the potential water available for trade or carryover. A contractor was appointed in May 2007 to complete enhancements to FMIT's web-site. This will be completed in August 2007

## 2.1.12. White Paper Reform

White paper reform includes:

- The Environmental Levy
- Water registry reform
- Rate reform
- Customer education

Due to the deferral of the White Paper Reform by the Victorian Government, the planned initiatives have been deferred to be implemented in the second year of the current regulatory period and became operational from July 2007.

Tariff reform was successfully undertaken, with initial reform steps undertaken by 1 July 2006, followed by full conversion to an "unbundled" rate structure, which became effective from 1 July 2007. Customers have been informed of these changes in several public meetings, by quarterly and special edition newsletters and through general media releases. The full effect of tariff reform and "unbundling" took place on 1st July 2007.

#### 2.2. Key Capital Projects

FMIT has progressed with three major capital projects during the current regulatory period. Completion of these projects was initially scheduled during the current regulatory period. Works are now reaching completion and it is expected that these capital projects will be operational from September 2007.

Details of the individual projects are as follows:

#### Benetook Water Storage

This project is now complete, and the storage was filled to capacity as at 30<sup>th</sup> June 2007. This Storage will have a dual benefit for FMIT irrigators. Firstly, the dam provides a water source to supply the improved Mildura South high-pressure system. Secondly, it provides a balancing storage during periods of short-term water restrictions, when extractions from the river are limited.

#### Mildura South Pump Station

This project has reached practical completion and will be operational on completion of the Mildura South High-Pressure Pipeline.

#### Mildura South High pressure system

The Mildura South High-pressure system is due for completion by 31 August 2007. The system will provide service to an area of approximately 750ha. It replaces the aged earthen channel and aged pipeline section of FMIT's district with a high-pressure service to approximately 10% of the district. This is expected to provide significant savings in on-farm pumping costs and provide potential extension to the irrigation season, allowing customers to diversify into other seasonal crops.

## 2.3. Actual expenditure for first regulatory period

FMIT's operational expenditure for the first year of the regulatory period exceeded expectations by approximately \$400,000. This variance is predominantly due to unpredicted maintenance works, with an increase in maintenance materials and contractors accounting for \$300,000 of the difference.

#### 2.4. Electricity Costs

As a result of the drought and reduced production of electricity from the Snowy Hydro system, the price of electricity has increased significantly.

A two-year electricity contract has recently been renegotiated and will apply to the second year of the current regulatory period and into the next regulatory period. These contracts have resulted in approximately \$268,000 electricity cost increase (46%).

## 2.5. Changes in legislative obligations

FMIT will not be making claims for costs arising from legislative obligations introduced in the first year of the first regulatory period. To date the Trust is not aware of any significant financial impact resulting from changes in legislation in the second year of the regulatory period that were not provided for in the 2006 Water Plan. In the event that such unforseen costs arise, a separate application may be considered.

#### 2.6. Performance against Revenue cap

FMIT's has not met its forecast for water deliveries in 2006/2007. A 15% shortfall in deliveries, due to lower seasonal allocations and customers reduced usage in response to drought conditions has impacted on FMIT's revenue. The shortfall against FMIT's revenue cap of approximately 5% has been factored into pricing for the second year of the regulatory period. Any variation to the second year of the period may be carried into the 2008/2013 regulatory period by way of separate application.

## 3. Customer Consultation

FMIT have developed and implemented processes to engage its customers and the community in its planning processes to ensure its services reflect the needs and expectations of customers.

This section details ways in which the FMIT consults its Board, customers, regulators and others in its strategies and pricing.

#### 3.1. Consultation with Customers / Community

The Government's agenda for water reform effective 1<sup>st</sup> July 2007, has been a main driver of priorities in the lead up to the preparation of this Water Plan. Many outcomes of the reform effective 1<sup>st</sup> July 2007 are yet to become apparent (e.g. Water trade issues, response to delivery share, water share and annual use limits).

FMIT does not utilise formal Customer Service Advisory Committees but rather relies on a Board comprised of members who are nominated and elected by the customer community. As the Board is made up of customers they are able to give consideration to these issues in the formation of policies impacting on customer service.

In addition, FMIT employs a number of methods of consulting with and informing customers. These methods assist the FMIT in understanding the views and needs of its customer base. Typical methods of consultation include:

#### Quarterly Newsletters and special newsletters to all customers

Newsletters are sent to all customers and include articles of concern to customers. Such articles may refer to service matters, water trading, updates on major works, upcoming events and deadlines, as well as matters of community interest.

#### Customer Feedback form

Of particular value is the customer feedback form included with the quarterly newsletters. Customers are invited to provide feedback and suggestions for the FMIT or its Board.

#### Media

In a regional area the local focus of television, radio and print media on community issues ensures significant exposure in the local community. As irrigation is the lifeblood of the region, the media engages in significant reporting in matters of interest to the sector. This ensures public exposure to matters facing FMIT's irrigators. The FMIT frequently provide releases to the local media. This is an excellent way to inform growers and the community of major issues and events.

## Public meetings and Annual General Meeting

Considerable consultation occurs at these meetings, as all parties are invited to ask questions and make comment.

The FMIT conducts public meetings to ensure that customers and the community are informed about major issues.

All of FMIT's irrigators are invited to its public meetings, including the Annual General Meeting where the Annual Report is presented and discussed at length. This provides greater transparency than small customer group consultation.

In the lead up to this water plan, issues discussed at public meetings included:

- O Distribution of "maintenance water" to irrigators as water share.
- o Report on performance against previous demand forecasts
- o Tariff setting and demand forecasts for 2007/2008
- o Progress on capital works
- o Impact of water allocations on FMIT viability
- o Impact of borrowings from Treasury Corporation Victoria.
- Change from renewals annuity to RAV method for providing for renewals.

FMIT is guided by customer response in forming policy.

## Annual customer survey

This survey is beneficial in identifying key performance indicators for customer service levels into the future.

The FMIT has initiated a comprehensive customer survey. Each year the survey is sent to 25% of its customer base on a rotational basis. It collects data about customer satisfaction, with detailed results published on the FMIT website and available at the office.

A copy of the 2006 customer survey results is appended to this Plan. The results of the survey reveal a very pleasing level of customer satisfaction.

#### Availability of Key Staff and Board Members

This ensures the executive staff and Board is in touch with grower sentiment, aware of their needs and the economic environment in which they operate.

FMIT's executive staff is readily available at the main office, and frequently meet with customers to discuss matters of a service nature. In addition board members are rostered to be available to meet on appointment with customers.

#### Grower elected Board of Directors

The directors on the FMIT Board are nominated from and elected by its irrigation customers. They are well placed to understand the service issues faced by irrigators.

Meeting the responsibility for sound management of the FMIT, whilst maintaining an awareness of customer needs, enables the FMIT Board to initiate policies that are in the interests of all stakeholders. Customers are provided with access to Board members in the normal course of events. Board members are also available on a weekly rostered basis to meet with customers at the ffice by appointment.

#### Public Documents

Customers are permitted access to a number of key documents. The FMIT makes available its Annual Report, Corporate Plan, Water Plan, Infrastructure Master Plan, Corporate Governance framework and Charters, Water Savings and Infrastructure Master Plan, Board Meeting agendas, Customer Survey results, Customer code, Media Releases and other documents. These are available from FMIT's website (www.fmit.com.au) or on request at the office.

Minutes of Board meetings are available for viewing by its irrigation customers at the office.

#### Master Plan Steering Committee

The FMIT Water savings and Infrastructure Master Plan is a major strategic document for the FMIT (see Section 5) as it sets out the future infrastructure needs for the sustained development of the Trust.

It's development was guided by a Steering Committee comprising 13 members. Representation includes Irrigators, Board Members (6), the Department of Sustainability and Environment, the Department of Primary Industries, Mallee Catchment Authority, FMIT Chief Executive Officer and FMIT Business Manager. URS Australia undertook the consultancy.

The committee reviewed all documentation which detailed the existing system and its limitations, as well as the various service options and risks associated with them. Further the committee considered the likely effects on the pricing impacts for each option.

The Steering Committee chose a preferred supply and drainage option to underpin the Master Plan.

The Steering Committee has provided the FMIT with input from a range of stakeholders in the formation of this key planning document.

## 3.2. Process of Approval

This Water Plan has been prepared to meet the requirements of the Essential Services Commission and the Statement of Obligations. An exposure draft is submitted to the Essential Services Commission on 31<sup>st</sup> July 2007 for publication and comment. Following the Commission's review process a final plan is lodged with the Minister for approval.

#### 3.3. Consultation on exposure draft

Following submission of the exposure draft of this Water Plan the following consultation has occurred.

#### 3.3.1. Publication on FMIT Website

FMIT's exposure draft is made available for public viewing and download via its website.

#### 3.3.2. Consultation with Department of Sustainability and Environment

A copy of the exposure draft has been provided for comment from the department. Written feedback from the General Manager, and also from the Acting Executive Director has been noted with relevant amendments made in this final plan.

Insertions to the plan includes section "4.2 Obligations"

## 3.3.3. Consultation with Department of Human Services

A copy of the exposure draft has been provided for comment from the department. Written feedback has been received regarding the Safe Drinking Water Act.

Insertions to the plan includes section "4.2.6 Safe Drinking Water Act"

#### 3.3.4. Consultation with Essential Services Commission

The exposure draft has been submitted to the Essential Services Commission. The FMIT is in receipt of a "Supplementary Guidance to Water Businesses – Draft Water Plans" on 11<sup>th</sup> September 2007.

Insertions include section "4.3 Foregone Revenue" addressing shortfalls in revenue from the first regulatory period.

## 3.3.5. Consultation with Environment Protection Authority

A copy of the exposure draft has been provided for comment from the Environment Protection Authority.

Insertion of section "4.4 Environmental Obligations" results from the feedback.

#### 3.3.6. Essential Services Commission

The ESC's public review process commences on 1 August 2007. The Water Plan will be subjected to the review process prior to its final pricing determination with regards to the water tariffs for 2008/2009.

This process will involve public customer meetings under the guidance of the Commission. It will also involve an audit process to evaluate FMIT's financial cost estimates, as well as establishing that FMIT's demand forecasts are reasonable.

## 4. Revenue Requirement

The major change in the development of the revenue requirement for FMIT has been the move away from capital expenditure funding from a Renewals Annuity, towards a Regulatory Asset Value method (RAV). FMIT's Infrastructure Master Plan identifies a future upgrade path, which requires the replacement of gravity systems with High-Pressure irrigation systems. As the renewal annuities method is based on the principle of like for like replacement it is not appropriate for the

Master Plan which requires changes to the underlying infrastructure. The Master Plan is suited to the RAV method of funding capital works.

## 4.1. Operational Expenditure

Operating Costs will be heavily impacted by recent increases in the electricity wholesale price. Electricity expenses have been driven up by the reduced level of supply provided by the Snowy Mountains Hydro Scheme. This has been caused by low water levels, resulting from diminished rainfall during current drought conditions. This is set to have a large impact across the region both on households and businesses alike, and will affect all businesses with high power requirements. Ultimately these costs will increase FMIT's revenue requirement. FMIT have recently entered into a two-year electricity contract effective 1<sup>st</sup> July 2007 which will impact on the current and next regulatory period.

The sharp rise in estimated wholesale electricity costs of \$268,000, or 46% has meant a higher than planned cost in electricity use for the new Benetook Pumping station, which will be operating during 2007/2008. The station was originally expected to incur electricity costs totalling \$132,000 pa, however this is now forecast to reach \$201,000, an increase of \$69,000 or 52%. As yet, there has been no indication from electricity providers or regulators to suggest that the wholesale price of electricity will return to previous levels in the next regulatory period.

Most other operating expenses have remained relatively stable in real terms. Wages are forecast to increase steadily throughout the period. FMIT staff is currently employed under an Enterprise Bargaining Agreement that allows for a 4% increase in wages per year. This increase has been applied consistently throughout the regulatory period.

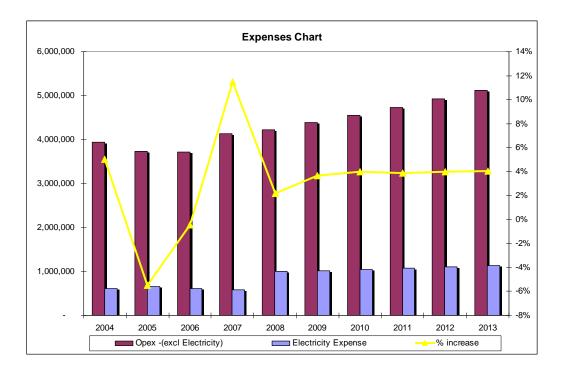
Whilst maintaining a static level of permanent staff, FMIT has required increasing assistance of external consultants in recent years. Consultants will be required to assist in improvements to the Asset Management System, due for installation in 2007/2008, as well as areas such as compliance matters including Corporate Planning.

Repairs and Maintenance expense are expected to continue at current levels despite a portion of FMIT's infrastructure being upgraded during the first regulatory period. This is due to the continued ageing of the remaining systems throughout the district.

Monies spent on environmental contributions have historically included a salinity and environmental levy. These are expected to remain at current levels throughout the regulatory period. Given the current focus on the environment, it is possible that these costs may change in the form of additional levies or purchase of environmental credits. Any significant change in these charges will constitute an 'unforseen event' and will be treated accordingly at the time. In the event that new matters are imposed, FMIT proposes to seek an adjustment to its revenue cap, and to include the

increased costs in its tariff structure. Examples of such obligations may be the introduction of a carbon trading scheme, new requirements arising from a change in the federal or state management of water resources, new compliance reporting or new obligations regarding the handling of drainage resulting from FMIT's activities.

The following graph presents an overview of the expenditure of the trust between 2004 and 2013.



#### 4.2. Obligations

Included within business as usual operating expenditure will be expenditure related to meeting of obligations to comply with FMIT's Statement of Obligations.

## 4.2.1. Emergency Response

FMIT will continue to develop its Emergency Response Plan. This will entail formal documentation of procedures to be followed under certain emergency incidents. This work will be done primarily in-house and will be funded within the business as usual Operational Expenditure.

## 4.2.2. Risk Management

FMIT has a documented Risk Management Framework. During the planning period it will continue to develop this strategy to keep up to date with risk areas. The Framework will be re-appraised in consultation with external parties, such as FMIT's insurers, and regulatory Departments. Development of the framework will be primarily conducted in-house and will be funded within the business as usual Operational Expenditure.

#### 4.2.3. Research and Knowledge

FMIT will continue to be active in the area of research and knowledge by maintaining cooperation in initiatives instigated by Mallee Catchment Management Authority, Department of Sustainability and Environment, and Department of Primary Industries. Programs to be continued include ongoing matters are water use efficiency, irrigation methods, etc.

#### 4.2.4. River Health

FMIT will continue to play a role in the development of regional River Health Strategies, particularly in co-operation with the Mallee Catchment Management Authority.

As FMIT has all off-takes and customer supply points metered, there is no costs factored into the operational costs for the purpose of installation of meters during this regulatory period.

Internal costs of complying with river health requirements in bulk entitlement orders are considered to be business as usual costs and met within the operational budget.

#### 4.2.5. Drought Response and Contingency Planning

It is possible that there will be a continued period of careful management of water allocations for irrigation during the planning period.

Costs associated with the possible requirement to update drought response plans are considered to be an in-house cost covered by FMIT's operational expenditure budget.

It is not expected that FMIT will purchase temporary water on water markets other than amounts funded by irrigators.

#### 4.2.6. Safe Drinking Water Act

FMIT does not provide drinking water, and therefore there are no cost implications in meeting with the Safe Drinking Water Act, other than incidental administrative costs for publicity in newsletters, rates notices, customers service codes etc. advising water users of the unsuitability of irrigation water for the purpose of drinking. These minor costs are covered by FMIT's operational expenditure budget.

#### 4.3. Foregone Revenue

FMIT is regulated under a "revenue cap" approach. This means that variations between forecast and actual revenue from the first regulatory period (due to differences in demand for services) may be taken into account in determining the revenue for the second regulatory period.

Since submission of the exposure draft it has become apparent that a significant shortfall will result in delivered water for 2007/2008, as a result of severely diminished seasonal allocations.

This is likely to cause a shortfall of approximately \$800,000 in FMIT's revenue for 2007/2008. An application for government grant will be considered, which if unsuccessful will result in this shortfall being carried into the second regulatory period and adjusted over the five year period. Such an approach will have significant impact on FMIT cash flow and irrigation water prices, particularly if seasonal allocations fail to recover to the estimated 70% for the first year of the regulatory period.

## 4.4. Environmental Obligations

#### 4.4.1. Murray Hardyhead

FMIT will continue to co-operate with the Mallee Catchment Management Authority to deliver environmental water to Lake Hawthorn to assist the management of the endangered Murray Hardyhead. An extension to the new Mildura South Pipeline has been installed specifically for the purpose of efficient supply and measurement of this water.

#### 4.4.2. Kings Billabong

FMIT is committed to the ongoing involvement in the preservation of Kings Billabong as a key environmental icon in the district. Many bird and plant species exist in this area due to FMIT's commitment to maintaining a sufficient water level.

#### 4.4.3. Catchment, Waterway and Groundwater management

FMIT will play a leading role in the Sunraysia Drainage Coordination Group, in cooperation with a range of community groups. This Group considers future management of Drainage for the region.

## 4.4.4. Assessment, Monitoring, Auditing and Reporting

State-wide customer service code and key performance criteria have recently been formed in consultation with the Essential Services

Commission. FMIT will meet its obligations to these criteria within its operating budget.

#### 4.5. Prior Capital Expenditure

#### 4.5.1. Valuing the New Asset Base

Capital works completed by the Trust throughout the first regulatory period have exceeded the estimate included in the Water Plan for the first regulatory period. The following table provides an analysis of the additional asset base to be added to the opening Regulatory Asset Base:

	Complete	WIP	Anticipated	Total		
Capex Protects	2005/6	2006/7	2007/8			
Pump Station T- North	106,352	2,294,440		2,400,792		
17th Street Pipe line replacement	786,428	4,005,811	1,650,000	6,442,239		
Benetook Water Storage	3,158,662	2,219,292	750,000	6,127,954		
New Pumps barnetts pump station			9,200	9,200		
Total Spend on Capex	4,051,442	8,519,543	2,409,200	14,980,185		
Opening cash balance 1 July 2006 of previous customer tariffs Additional Annuity from Tariffs derive the 06/07 and 07/08 years.	(5,000,000) (1,800,000)					
Total additional Asset Base to be included in the RAB 8,180,18						

The additional asset base to be applied to the new regulatory period is valued at \$8.18M. This portion of capital works completed in the current regulatory period has not been funded from past or present customer tariffs. Of the \$14.97M expended, \$6.8M will have been funded from customer tariffs in past years.

The asset base (RAB) will be incremented by works during the regulatory period, as detailed Section 4.4.

## 4.6. Managing the Transition from renewals arrangements to RAV

At the beginning of the first regulatory period the Commission set the RAB to zero, this has made the build up of the RAB independent of customer funding very different. In order to achieve a level of return that will cover the debt payments on the borrowings used to fund these assets and associated interest costs, the RAV depreciation period applied in the initial years of a 50 year capital works program has been set at ten years. For asset projects after 2018, the RAV depreciation period will be reviewed. It is expected that a depreciation period of 35 years will be appropriate for new assets and from 2030 onwards a 50 year RAV period may be appropriate for new assets.

By applying a RAV life of ten years to the assets, the depreciation and return will enable the Trust to complete an additional \$10.718M in capital

works by 2017. The RAB at that time is expected to be \$6.59M. FMIT will lengthen the RAV depreciation period to match the asset life as the asset base grows and continues to return sufficient funds to cover debt payments and borrowing costs.

RAV Time Frame applied	10	Yr RAV Appli	ied	35 Yr RAV Applied	50 Yr RAV Applied
Financial Year	2007-08	2008/13	2014/18	2018/29	2030/33
Cash / Loan position					
Opening Balance	(4,700,000)	(4,700,000)	(2,280,039)	(562,634)	(3,849,351)
Interest (Payment)/Received	(291,400)	(1,337,082)	(1,121,277)	(3,465,500)	(1,160,590)
Repayment/Saving From RAV	291,400	6,576,403	10,738,681	17,891,184	5,517,298
Capital Spend	-	(2,819,360)	(7,900,000)	(17,712,400)	(9,600,000)
Closing Balance	(4,700,000)	(2,280,039)	(562,634)	(3,849,351)	(9,092,643)
RAV ASSET BASE					
Regulatory Asset Base					
Opening	943,656	9,079,703	7,332,060	6,823,569	14,204,578
CAPEX	8,180,000	2,819,360	7,900,000	17,712,400	9,600,000
	(see 4.2.1)				
RAV Depn	(43,953)	(4,567,002)	(8,408,492)	(10,331,391)	(2,099,249)
Closing Balance	9,079,703	7,332,060	6,823,569	14,204,578	21,705,328
RAV ANALYSIS					
RAV Depreciation	43,953	4,567,002	8,408,492	10,331,391	2,099,249
RAV Return	247,447	2,009,401	2,330,190	7,559,792	3,418,048
Total	291,400	6,576,403	10,738,681	17,891,184	5,517,298

## 4.7. Planned Capex

The following projected works are to be carried out during the second regulatory period as detailed in FMIT's 50 year Infrastructure Master Plan. These have been based on a detailed independent assessment of expected lives of FMIT's infrastructure components.

Capex plan - Second Regulatory Period

			Second	Regulatory F	Period	
	Regulatory Year	Year 1	Year 2	Year 3	Year 4	Year 5
	Works	2009	2010	2011	2012	2013
K East Pipelines	Partial Replacement		230,700			
K West	Partial Replacement		36,900			
T South	Partial Replacement		183,200			
E Pipelines	Partial Replacement		222,800			
L South Sub-area	Partial Replacement			1,606,060		
Benetook Pumps	Replace Electrical Works		200,000			
Drainage Pump Replacement	Pump, motor & switchboard replacement	67,940	67,940	67,940	67,940	67,940
Total Capex Spend		67,940	941,540	1,674,000	67,940	67,940

## Drainage Pump replacements

Over the 5 years of the regulatory period a replacement program will be undertaken for drainage re-lift points throughout the system. These will be prioritised based on the condition of the pumps and will be addressed throughout the period. It is expected that the replacements will be spread evenly throughout the period.

#### Year 2 works

In the second year of the period it is planned that the partial replacement of various systems will be addressed. Whilst this is not full replacement, the approach will be to replace pipes requiring renewal with high-grade pipe work, consistent with future high-pressure systems. This is to prevent future duplication of capital expenditure.

#### L-South Sub Area

The L-South Sub-System has the shortest expected life of any of FMIT's sub-systems. In addition it presents a risk with open channels in a built up area, particularly in the proximity of a government primary school. This system has been the subject of applications for government funding.

The L-South sub-System is due for replacement in its entirety during 2014 to 2016. Some portions of this system have a shorter expected life, and will require replacement in year three of the regulatory period. Any deferral of these works to 2014 to 2016 would be dependent on an annual assessment of the condition of those assets. Consideration will be given to bringing forward the full replacement for this Sub-System if government subsidies were to be made available. The policy will be to replace any components of the system with high-grade pipe work, consistent with future high-pressure systems. This is to prevent future duplication of capital expenditure.

## 5. Demand Forecasting

## 5.1. Approach to Demand forecasting

Forecasting of irrigation demand presents several challenges for FMIT over the regulatory period. It requires looking forward six years and taking into consideration the effects of urban encroachment, the introduction of a high pressure sub-system, water trading outcomes, improved irrigation practices and a possible staged return from drought conditions towards full water allocations.

Historically irrigation allocations in this high security region have been consistently high. There is growing sentiment however that the times of water security may be over, and while demand estimates are based on a staged return to 100% allocations, it must be recognised that variations to

demand, will impact on individual tariffs in following years within the planning period.

#### 5.2. Urban Encroachment

Urban Encroachment has presented challenges for FMIT during a period of rapid urban growth impacting directly on the Trust's traditional irrigation district. Over recent years an average of 39.3ha per year is lost to urban growth (Sunraysia Drainage Strategy 2000 – Current Situation Report). This represents an annual reduction of 0.5% of the FMIT's irrigation district. This is offset in part by the continued "in-fill" of non irrigated portions within the existing district of approximately to 16ha per annum.

As the district contracts, the demand for water is likely to continue to decrease over future years. In addition, the economic impact of the drought over the 2005/2006 and 2006/2007 years is likely to result in increased pressure on owners of small land parcels to retire irrigated land and trade water out of the district for economic relief. These pressures, together with a likely lower than 100% water allocations, has led FMIT to take a conservative approach in estimating demand for the second regulatory period. Thus FMIT will minimise the risk of shortfall in revenue as a result of an expected reduction in water demand, particularly in the first two years of the regulatory period.

FMIT, has implemented a number of offsetting strategies which due to the uncertain nature of the outcomes, have not at this stage been included for the purpose of tariff setting. These include the possible supply of drainage services to new urban areas developed in traditionally FMIT irrigated land areas. FMIT will also continue to encourage irrigators to develop new plantings in areas of their land previously not irrigated. This option has recently been made more attractive due to the granting of water shares previously treated as "maintenance" entitlements for unplanted areas on irrigators land within the district.

By adopting the revenue cap approach to pricing, any under or over estimate in volumetric demand forecasts will be carried forward into subsequent years and will be reflected in tariff setting.

#### 5.3. Introduction of Mildura South High-Pressure sub-system

The 2007/2008 irrigation season will see the introduction of a new high-pressure sub-system affecting approximately 10% of its irrigation district. The impacts on demand are uncertain, particularly in the short term. Whilst it is expected that conversion to improved on-farm irrigation practices will have a gradual downward impact on demand volumes, it is expected this will be offset by irrigators diversifying into other seasonal crops resulting in a continuous pumping season for this sub-system. Overall demand is not expected to dramatically change due to these two offsetting factors.

#### 5.4. Water trading outcomes

Permanent water trading does impact on FMIT's revenue and costs for Bulk Water Charge. It is the strongest indication of the effects of urban encroachment and economic pressures on FMIT's irrigators. This water becomes available for trade from customers who retire from irrigation, or are seeking short term economic relief from the cash realisation of the trade. Water trading does not impact as heavily on volumetric revenue as it does on revenue from fixed charges based on water share. This is because it is largely water which is surplus to the irrigator's annual requirements and would thus not otherwise be used.

Permanent water trade in 2007/2008 is expected to be a little higher than other years due to the granting of approx 5000ML of "maintenance" water share to irrigators. This water is available for use or trade from 2007/2008, and with recent significant rises in the market value of water entitlements customers facing economic hardship may be enticed to trade this water, affecting the total water share balance of FMIT irrigators.

The trend in permanent water trade out of the district during the regulatory period is forecast to be at a rate of 0.7% per annum. An initial trade of 1000ML from the 5000ML of "maintenance" water granted to irrigators is predicted in the 2007/2008 irrigation season (prior to the regulatory period).

The following table illustrates the estimated customer Water Share balances for the regulatory period.

Irrigation season	Forecast Water Share Balance	Irrigation season	Forecast Water Share Balance
2007/2008	65889 ML	2010/2011	63440 ML
2008/2009	64400 ML	2011/2012	62965 ML
2009/2010	63920 ML	2012/2013	62490 ML

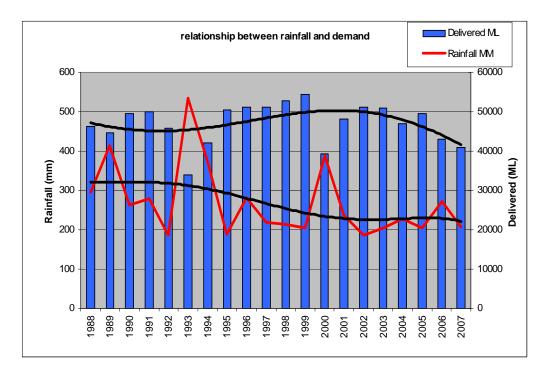
#### 5.5. Factors required for increased demand

The current climatic conditions have dramatically altered the approach and reliability of demand forecasting. Several factors combine to force demand levels downward. For the first time since the introduction of water allocation entitlements, the Sunraysia area is in a situation where not only crop requirements, but also the availability of water are key issues that influence water demand.

Until recently, lower rainfall generally would correlate with higher irrigation demand. Currently, due to a lack of water levels, lower than average rainfall will further impact on seasonal allocations and continue to drive demand downwards. Any upward trend in demand would require sufficient availability of water, together with an average or below average period of rainfall.

A 6 year trend in rainfall compared to volumetric delivery indicates no conclusive correlation. It does however reveal a more efficient irrigation

practice in recent years. Irrigators are using progressively lower volumes since 1999/2000, despite consistently lower rainfall as illustrated in the following graph.



FMIT in its previous water plan forecast delivery based on an average of the previous 5 years plus one year being a low delivery year (1999/2000). The inclusion of the low delivery year was introduced to bring a degree of conservatism into the forecast and reduce vulnerability to a lower than average period. This would have a significant financial impact on the FMIT, at a time when it was entering a phase of significant capital investment in infrastructure.

Despite the conservative estimates, FMIT has suffered from a shortfall in its delivered volumes in 2006/2007 following a previous low year in 2005/2006. The five year trend on delivered volumes continues to decline, despite a levelling in rainfall.

For this reason FMIT has adopted a forecast method based on an average of the five years to June 2007 plus 1999/2000 and factored in a decline in that average of 1% per annum. To this base estimate, an adjustment has been made to reflect the possible staged return to 100% seasonal allocations for irrigation.

#### 5.6. Drought Conditions/ Seasonal Allocations

The southern part of Australia has been impacted by continuing drought conditions bringing lower than average rainfall for approximately eight years with storage levels in the Murray River system gradually declining since 1999. While there have been encouraging signs, with rain events from January to May 2007, rainfall remains below average. Further, it is expected that seasonal irrigation allocations will be as low as 5% from July

2007, and it is doubtful that allocations for 2007/2008 will return to previous levels.

Continued low rainfall will place further pressure on seasonal allocations into the regulatory period. It is expected that there will be several years of low allocations as water reserves accumulate in the upper storages.

FMIT have assumed a 50% seasonal allocation for 2007/2008 in predicting its water delivery volumes. In addition to this it is estimated that carryover entitlements from 2006/2007 will provide an additional 10,000ML of available water entitlement. It is estimated that delivery volumes will be 39850ML, marginally below the 2006/2007 level of 40,100ML.

Over the regulatory period a staged return to typical weather patterns and improved seasonal allocations has been assumed. Forecast allocations are as indicated in the following table.

Irrigation season	Forecast Seasonal allocation	Irrigation season	Forecast Seasonal allocation
2007/2008	50%	2010/2011	100%
2008/2009	70%	2011/2012	100%
2009/2010	90%	2012/2013	100%

## 5.7. Forecast delivery volumes for the regulatory period

All the above aspects are reflected in the forecast delivery volumes for FMIT during the regulatory period. The following tables show the build up of delivery estimates.

Financial Year	Delivered ML	Losses ML	Required Pumping ML	Loss %	Pumped as % of Delivered
1999/2000	39,344	9,645	48,989	19.7%	124%
2002/2003	50,838	8,014	58,852	13.6%	116%
2003/2004	47,064	11,842	58,906	20.1%	125%
2004/2005	48,829	9,468	58,297	16.2%	119%
2005/2006	43,068	7,917	50,985	15.5%	118%
2006/2007 (95% alloc)	40,100	7,436	47,536	15.7%	119%
Average for 6 yrs	44,873	9,053	53,297	17.0%	119%

Expected future demand declining by 1% per annum from the 6-yr average, and adjusted for a staged return to 100% allocations an average loss percentage has been used to calculate pumping figures.

oaroarate parripring inguitos	Base estimate ML	Estimate Season alloc'n	Adjusted Demand ML	Pumped ML	Pumped as % of Delivered
2007/2008	44,424	50%	39,850	47,420	119%
Regulatory period					
2008/2009	43,980	70%	41,630	49,540	119%
2009/2010	43,540	90%	42,000	49.980	119%
2010/2011	43,100	100%	43,100	51,295	119%
2011/2012	42,675	100%	42,675	50,780	119%
2012/2013	42,250	100%	42,250	50,275	119%

#### 5.8. Forecasting Volume of water subject to High-Pressure Levy

From 2007/2008, a new tariff will apply to all customers connected to the high-pressure sub-system in Mildura South. These customers do not require on-farm pumping, and will be subject to a levy for the recovery of operating electricity charges incurred at the new pump station. In estimating the volume of water subject to this levy, FMIT has assumed a similar percentage of water share actually delivered as compared to the total FMIT district.

The following tables demonstrates the forecast irrigation and garden supply volumes subject to the tariff:

Calculation of Volumes used in surcharge – Irrigation	Total of all Water Shares ML	Total Delivery Forecast ML	water share Delivered %	Mildura South Water Share ML	Forecast Deliveries Mildura South ML
2007/2008 Regulatory period	65,889	39,850	60.5%	6,655	4,025
2008/2009	64,400	41,630	64.6%	6,505	4,200
2009/2010	63,920	42,000	65.7%	6,460	4,244
2010/2011	63,440	43,100	67.9%	6,410	4,350
2011/2012	62,965	42,675	67.8%	6,370	4,320
2012/2013	62,490	42,250	67.6%	6,320	4,270

Calculation of Volumes used in surcharge – Garden	Total Garden Water Shares ML	Garden Delivery Forecast ML	Garden water share Delivered %	Mildura South Water Share - Garden ML	Forecast Deliveries Mildura South - Garden ML
2007/2008	2,518	1,300	51.6%	125	65
Regulatory period	·	·			
2008/2009	2,468	1,400	56.7%	125	70
2009/2010	2,446	1,500	61.3%	125	75
2010/2011	2,425	1,600	66.0%	125	80
2011/2012	2,405	1,600	66.5%	125	85
2012/2013	2,387	1,600	67.0%	125	85

## 5.9. Forecasting Delivery Capacity Share charges

Delivery Capacity Share is to be charged in a new format from 1<sup>st</sup> July 2007, based on FMIT's capacity to deliver water to rated land. The Trust has a responsibility to provide a system capable of delivering 9.144ML of irrigation water per hectare of land carrying water rights in its district.

The charge applies whether or not a ratepayer holds a water share, as it's based on the delivery capacity.

Under FMIT's service standard a ratepayer may not expect delivery of any greater than 12% of their annual share in any 14-day irrigation period. Delivery Capacity Share will thus be charged on the basis of "maximum ML/14days" with the units charged being 12% of the potential delivery at 9.144ML/hectare.

The FMIT has 7602ha of land carrying water rights in its district, allowing for the receipt of 69500ML of irrigation water per year, or 8340ML per 14 days.

While some areas of land will be subdivided and retired from irrigation during the regulatory period, an introduction of an exit fee for all Victorian rural water businesses will ensure a revenue stream beyond this period.

## Delivery Capacity on Garden services

In respect of Garden services, Delivery Capacity Share will be charged per service at a rate equivalent to a 2ML rate for irrigation. This is due to the Water share not having a relationship to the area of land. Most gardens have a 2ML water share while some larger gardens have up to 8ML. All are limited in the to a delivery rate not exceeding 1.125Ltrs /Sec.

As from 1<sup>st</sup> July 2007, garden customers will own a Water Share and are entitled to permanently trade water. It is expected that some of those with over 2 ML will trade their surplus. Total water share for Garden supplies at 1<sup>st</sup> July 2007 is 2518ML applicable to 1016 services. Of the potential surplus of 486ML, it is estimated that 50 ML will be traded in 2007/2008 and then 5% per annum throughout the regulatory period.

#### Analysis of Garden Water Share

Irrigation season	Garden supply Water Shares Balance	Irrigation season	Garden supply Water Shares Balance
2007/2008	2518 ML	2010/2011	2425 ML
2008/2009	2468 ML	2011/2012	2405 ML
2009/2010	2446 ML	2012/2013	2387 ML

The tariff for Garden Supply delivery capacity share is 12% of the irrigation tariff, being the equivalent annual rate per ML.

#### 5.10. Drainage Tariff

FMIT provides a comprehensive drainage service which is available to 85% of its district. The drainage charge is a fixed tariff based on the water use limit (ML) for all customers to whom the service is available. Forecasts have been based on the expectation that drainage will represent 85% of the total water use limit of irrigators. The water use limit of irrigators is based on the Bulk Water Share less Garden Supply Share.

	Total Water use Limit ML	Garden Water use Limit ML	Irrigator Water use Limit ML	% Drained	Forecast Drainage Charge ML
2007/2008	65,889	2,518	63,371	85%	53,865
Regulatory period					
2008/2009	64,400	2,468	61,932	85%	52,642
2009/2010	63,920	2,446	61,474	85%	52,252
2010/2011	63,440	2,425	61,015	85%	51,862
2011/2012	62,965	2,405	60,560	85%	51,476
2012/2013	62,490	2,387	60,103	85%	51,087

#### 5.11. Water tariffs

The following notes describe the tariffs proposed by FMIT for water:

#### Customer Charge

This tariff is charged per each customer account. A customer may combine multiple accounts onto one statement and thereby reduce customer charges. A customer has the option to combine all services onto one account and pay just one customer charge.

## Service Point Charge

This is charged for each connection to FMIT's irrigation or garden supply services. Some customers have more than one service point, others for convenience have more. Each service point is metered with meters read for billing purposes. FMIT maintenance staff maintains the service points. A customer may where practical rationalise the number of service points on the property.

#### Auxiliary Supply

This is for irrigators only. Some irrigators elect to have an un-metered connection for the purpose of spray tank filling and wash bay. A nominal annual fee applies.

#### Delivery Capacity Share

This charge is derived from Victorian Government water reform. It represents the potential level of service available to the customer. It is based on FMIT's capacity to provide water to the customer. It is expressed in the terms of the service offered by FMIT. For tariff purposes this charge is expressed as "max ML / 14 days". For garden supplies the capacity share is levied per service.

#### Metered Use

This is the tariff for delivery of water to the customer. It is based on the consumptive use of water measured at the customer's service point. For garden supplies the tariff is two times the tariff for irrigation. This reflects the convenience of water on demand for garden customers.

#### Excess Water

This is a penalty rate intended to provide incentive to customers to operate within seasonal allocation levels. The tariff is set at \$300 per ML up to 10% over allocation and \$1000 per ML for more than 10% over allocation throughout the regulatory period. This is a surcharge and is additional to the volumetric metered use charge for water used.

#### Casual use rate

This applies to a select group of irrigation or special use customers. It may include parks and public gardens, or industrial use. Water is taken on demand but at significant flow rates. It is a priority service taken without scheduling. A premium rate applies, reflecting the priority service provided.

#### Exit fees

As a result of Water Reform legislation effective from 1<sup>st</sup> July 2007, rural water authorities have capacity to introduce exit fees. These fees give discretion to water authorities to charge a fee to irrigators who choose to retire their land from irrigation, and are intended to protect continuing users from being forced to subsidise the cost of infrastructure charges.

#### 5.12. Demand Estimates

The following table provides the demand forecast for each of the fixed and volumetric tariffs for water supply over the regulatory period.

Demand forecast by Basis of Charge		2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
raini item	I GI	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Irrigation Supply						
Customer Charge	Account	949	949	949	949	949
Service Point	Connection	1,523	1,523	1,523	1,523	1,523
Auxiliary supply	Connection	25	25	25	25	25
Bulk Water Charge	ML of water share	61,932	61,474	61,015	60,560	60,103
Delivery Capacity Share	ML/14 days	8,340	8,340	8,340	8,340	8,340
Metered Use	ML used	39,920	40,190	41,190	40,765	40,340
Excess water to 10%	ML used	100	100	100	100	100
Excess water > 10%	ML used	30	30	30	30	30
Casual Usage	ML used	160	160	160	160	160
High Pressure Levy	ML used	4,200	4,244	4,350	4,320	4,270
Drainage Service						
Drainage Charge	ML water use limit	52,642	52,252	51,862	51,476	51,087
Garden Supply						
Customer Charge	Account	779	779	779	779	779
Service Point – Gravity	Connection	660	660	660	660	660
Service Point - Pressurised	Connection	367	367	367	367	367
Bulk Water Charge	ML of water share	2,468	2,446	2,425	2,405	2,387
Delivery Capacity Charge	Per Service	1,027	1,027	1,027	1,027	1,027
Metered Use	ML used	1,400	1,500	1,600	1,600	1,600
Excess water to 10%	ML used	10	10	10	10	10
Excess water > 10%	ML used	10	10	10	10	10
High Pressure Levy	ML used	70	75	80	85	85

#### 6. Tariffs

## 6.1. Approach to Tariff Setting

The proposed tariff structure for infrastructure and services delivered by FMIT remains largely unchanged from the structure adopted in the first regulatory period. In preparing the previous Water Plan, some tariff reform was undertaken to prepare for the Victorian government's water reform, particularly the impacts resulting from unbundling and the introduction of Delivery Capacity Share, which replaced the previous "Access Charge" tariffs.

The tariff structure adopted during the first regulatory period has been well received by its customers and is regarded as a fair tariff structure which is equitable throughout FMIT's customer base.

Our tariff structure is based on a number of key principals. These include:

- Tariff items are applied evenly and fairly across the customer base;
- A tariff is applied for each service component, eg. Customer fee, service point, delivery capacity, metered use, drainage to ensure that tariffs more closely reflect the services and initiatives used by individual customers; and
- Customers have options which allow them to minimise their cost, for example, combining accounts or decommissioning unused service points.

#### 6.2. Service Categories

FMIT provides infrastructure and services under three major categories:

#### Irrigation services

The extraction and reticulation of untreated water from the Murray River to the farm gate for use in irrigation.

## Water for gardens

The extraction and reticulation of untreated water from the Murray River to the boundary of the property for use on gardens.

#### Drainage services

The acceptance of sub-surface drainage water from the farm gate, and removal to discharge sources, comprising of mainly evaporation basins.

A new accounting code requires FMIT to account for costs by major business service. In the case of garden supply services, there is no physical separation of the service from that of irrigation services and costs are thus allocated in most cases on a pro-rata volume (ML) basis. For this reason a nearly identical tariff system applies to garden customers as that which is applied to irrigators.

The provision of drainage services is largely incidental to the provision of irrigation services. For this reason historic separation of costs has not been performed. There is a strong relationship between irrigation and drainage services. The service being provided almost exclusively to the same customers. In addition, both infrastructures are repaired and maintained by the same maintenance personnel. As from 1<sup>st</sup> July 2007 further analysis and separation of costs reporting will occur and steps have already been taken to estimate drainage costs based on required plant, infrastructure and vehicle costs, together with direct costs of maintenance materials, labour, equipment hire and service contractors. There is also a cost for electricity used by drainage re-lift pumps to re-direct water to discharge points.

#### 6.3. Tariff Structure

Essentially irrigation customers and garden supply customers are receiving the same product from FMIT, namely untreated water for irrigation purposes, either for horticultural or garden use. Both are supplied from off-takes from the same distribution pipes servicing FMIT's district and originating from the same pumping station.

For this reason both are treated on an equitable basis and are subject to very similar tariff structures. The difference between irrigation and garden supply services lies in the level of service. Irrigation customers are required to schedule watering times and may take water at a rate of up to 45 litres per second using FMIT's water on order system. Garden supply customers on the other hand, are able to take water on demand without scheduling, but are limited to 1.125 litres per second.

Both are charged in accordance with the same tariff structure although garden supplies are provided at a higher metered volume rate to reflect the convenience of taking water on demand, with FMIT allocating a portion of its delivery capacity for this demand without notice.

#### 6.4. Tariff structure for drainage service

Water received into FMIT's drains originates from irrigation use and rainfall/flood waters on irrigation properties. The water collected from properties is transferred by gravity to drainage sites or re-lifted via a network of pump sites to drainage sites. A single tariff applies to drainage services based on the water use limit of customers.

Tariff structures for irrigation and garden supply services are currently as follows:

Tariff Item	Fixed / Volumetric		
Irrigation Supply Services			
Customer Charge	Fixed	Account	\$150.00
Service Point	Fixed	Connection	\$130.00
Auxiliary supply	Fixed	Connection	\$100.00
Bulk Water Charge	Fixed	ML of water share	\$6.09
Delivery Capacity Share	Fixed	ML/14 days	\$265.00
Metered Use	Volumetric	ML used	\$36.90
Excess water to 10%	Volumetric	ML used	\$200.00
Excess water > 10%	Volumetric	ML used	\$800.00
Casual Usage	Volumetric	ML used	\$208.00
High Pressure Levy	Volumetric	ML used	\$30.00
Garden Supply Services			
Customer Charge	Fixed	Account	\$150.00
Service Point - Gravity	Fixed	Connection	\$130.00
Service Point - Pressurised	Fixed	Connection	\$190.00
Bulk Water Charge	Fixed	ML of water share	\$6.09
Delivery Capacity Charge	Fixed	Per Service	\$63.68
Metered Use	Volumetric	ML used	\$73.80
Excess water to 10%	Volumetric	ML used	\$200.00
Excess water > 10%	Volumetric	ML used	\$800.00
High Pressure Levy	Volumetric	ML used	\$30.00
Drainage Services			
Drainage Charge	Fixed	ML water use limit	\$4.92

#### 6.5. Revenue Mix

FMIT has adopted a position of setting tariffs in a manner that aims to achieve approximately 66% to 70 % of its revenue from fixed tariffs, and the balance from volumetric tariffs. This approach ensures a better coverage of fixed costs.

This approach minimises the risk for both FMIT and customers in that the Trust is able to temper any significant financial impact during periods of fluctuating demand by ensuring it is not heavily reliant on meeting demand forecasts in order to recover its operating costs.

Variations in demand are usually within 10% of forecast, thus impacting revenue by only around 3.3%, and ensuring operating costs are met.

In 2006/07 despite demand dropping around 15% below forecast, FMIT's revenue was approx 5% below its revenue cap, and operating costs were fully recovered.

The table indicates the impact of demand falling short by various levels.

Demand variation	Impact on revenue	Demand variation	Impact on revenue
- 50%	- 16.7 %	+ 50%	+ 16.7 %
- 40%	- 13.3 %	+ 40%	+ 13.3 %
- 20%	- 6.7%	+ 20%	+ 6.7%
- 10%	- 3.3%	+ 10%	+ 3.3%

FMIT's tariff structure has been structured to provide an equitable basis for pricing of its services, with tariff components based on services provided. Irrigation and garden supply services are by nature similar, and charges to FMIT's irrigation and garden supply customers reflect the same tariff components. Drainage services have a simple tariff structure consisting of a single tariff.

The respective contribution of each tariff, either FMIT's operational and administration costs (fixed) and variable cost, is as follows:

Tariff	Fixed Tariff	Variable Tariff (Volumetric)
Customer Charge	✓	
Service Point Charge	✓	
Subsidy Supply	✓	
Delivery Capacity Share	✓	
Metered use		<b>√</b>
Excess Water		<b>√</b>
Casual use Rate		<b>√</b>
Drainage	✓	
Exit Fees	✓	
High pressure Levy		✓

#### 6.6. Drainage

In the past drainage services have not been considered a separate service but incidental to irrigation services, this is because it is largely incidental to the provision of irrigation services. The service is provided exclusively to FMIT irrigators and represents approx 5% of FMIT's operational income. A new Accounting Code, requires separation of these costs and over time a true cost will be identifiable. For 2007/2008, drainage costs and required revenue have been estimated as follows.

Drainage Cost Component	Annual Cost		
Wages and on costs – 2 employees plus apportioned supervision	\$125,000		
Electrical and plumbing Contractors	\$38,000		
Depreciation and running cost – 1 vehicle	\$20,000		
Depreciation of Plant	\$14,000		
Electricity for re-lift pumps	\$12,000		
Share of pipes and materials (20% estimate)	\$100,000		
Total Revenue required from Drainage Services	\$309,000		

Drainage and delivery capacity charges will continue to apply to irrigable land when irrigators sell their water share and retire land from irrigation. Customers will have the option of paying an exit charge to withdraw from the rating district. The exit fee may be up to 15 years of fixed costs (being drainage and delivery capacity), depending on the intended period of continued service by the authority. Areas that are known to be subject to imminent urban development or doubtful viability as a district may attract an exit fee based on a shorter period.

## 6.7 Tariffs Forecast for Regulatory Period

The following table summarises the tariff outlook for the 5-year regulatory period. These tariffs are detailed in the ESC Model for revenue requirements and are formulated to meet the revenue required for FMIT's operating expenditure and Regulatory Asset return.

Tariff Item		2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Irrigation Supply Services							
Customer Charge	Account	\$150.00	\$165.00	\$175.00	\$185.00	\$190.00	\$200.00
Service Point	Connection	\$130.00	\$145.00	\$170.00	\$175.00	\$180.00	\$190.00
Auxiliary supply	Connection	\$100.00	\$110.00	\$125.00	\$130.00	\$140.00	\$150.00
Bulk Water Charge	ML of water share	\$6.09	\$5.96	\$6.21	\$6.46	\$6.74	\$7.02
Delivery Capacity Share	ML/14 days	\$265.00	\$306.00	\$393.00	\$416.00	\$435.00	\$449.72
Metered Use	ML used	\$36.90	\$39.90	\$40.20	\$41.90	\$43.32	\$44.78
Excess water to 10%	ML used	\$200.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
Excess water > 10%	ML used	\$800.00	\$1000	\$1000	\$1000	\$1000	\$1000
Casual Usage	ML used	\$208.00	\$215.00	\$225.00	\$225.00	\$230.00	\$270.00
High Pressure Levy	ML used	\$30.00	\$48.00	\$50.00	\$52.00	\$53.00	\$54.00
Garden Supply Services							
Customer Charge	Account	\$150.00	\$165.00	\$175.00	\$185.00	\$190.00	\$200.00
Service Point - Gravity	Connection	\$130.00	\$145.00	\$170.00	\$175.00	\$180.00	\$190.00
Service Point - Pressurised	Connection	\$190.00	\$239.00	\$265.00	\$275.00	\$280.00	\$290.00
Bulk Water Charge	ML of water share	\$6.09	\$5.96	\$6.21	\$6.46	\$6.74	\$7.02
Delivery Capacity Charge	Per Service	\$63.68	\$73.44	\$75.93	\$78.50	\$81.15	\$83.90
Metered Use	ML used	\$73.80	\$79.80	\$82.50	\$85.29	\$88.18	\$91.16
Excess water to 10%	ML used	\$200.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
Excess water > 10%	ML used	\$800.00	\$1000	\$1000	\$1000	\$1000	\$1000
High Pressure Levy	ML used	\$30.00	\$48.00	\$50.00	\$52.00	\$53.00	\$54.00
Drainage Services							
Drainage Charge	ML water use limit	\$4.92	\$5.98	\$6.12	\$6.24	\$6.60	\$6.88

## 7. Closing Comments

The fundamentals of the FMIT are sound and given the 50 year planning horizon in respect of infrastructure projects together with the forward projection of funding sources, the FMIT are satisfied that the ongoing ability of the business to continue to deliver a high quality and reliable service at acceptable rates is achievable.

We would like to thank all the customers and other stakeholders for their ongoing support through current challenging times.