

Background paper QCA review of irrigation prices

Centralised costs

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1 Introduction

The Queensland Competition Authority (QCA) is to recommend prices for SunWater's irrigation customers. SunWater has prepared Network Service Plans (NSPs) that set out the forecast operating and capital expenditure for each water supply scheme and distribution system. These forecasts include the allocation of the cost of activities that have been centralised in Brisbane and regional offices.

The purpose of this background paper is to describe the centralised activities and explain how those costs have been allocated.

This paper is structured as follows:

- Section 2 provides an overview of SunWater's organisational structure and resourcing;
- Section 3 outlines SunWater's approach to cost allocation and the outcomes for bulk water and distribution costs;
- Section 4 provides some high-level, indicative comparisons to another water business; and
- Section 5 provides a conclusion.

Detailed cost information for each functional group is set out in Attachment 1 as well as the allocation of insurance costs and the proposed expenditure on a replacement to the SunWater Water Information Management System.

It is important to note that the functions and costs presented in this paper are those that are resourced centrally, and do not include the costs involved in the physical operation of water supply assets, including labour for operations staff.

2 Organisational overview

SunWater's resourcing arrangements and the scope of services are set out below.

2.1 Resourcing

SunWater's assets and activities span a wide geographic area across regional Queensland. SunWater also provides a range of services within and outside of Queensland. It is therefore imperative that it efficiently organises these resources to deliver services across this diverse base, at minimum cost. In order to achieve this, SunWater has centralised a large number of functions and established specialist technical groups. This approach maintains a critical mass of expertise and enhances organisational controls and performance, as well as consistency in approach across the organisation.

The people who perform these tasks are located in Brisbane and four regional locations, depending on their technical discipline and type of activity performed. These are called centralised resources in this paper.

In addition, SunWater has a workforce located at or nearby SunWater's assets. These staff are responsible for asset operations and maintenance, and performing the day-to-day task of delivering water to customers. These are called local resources in this paper.

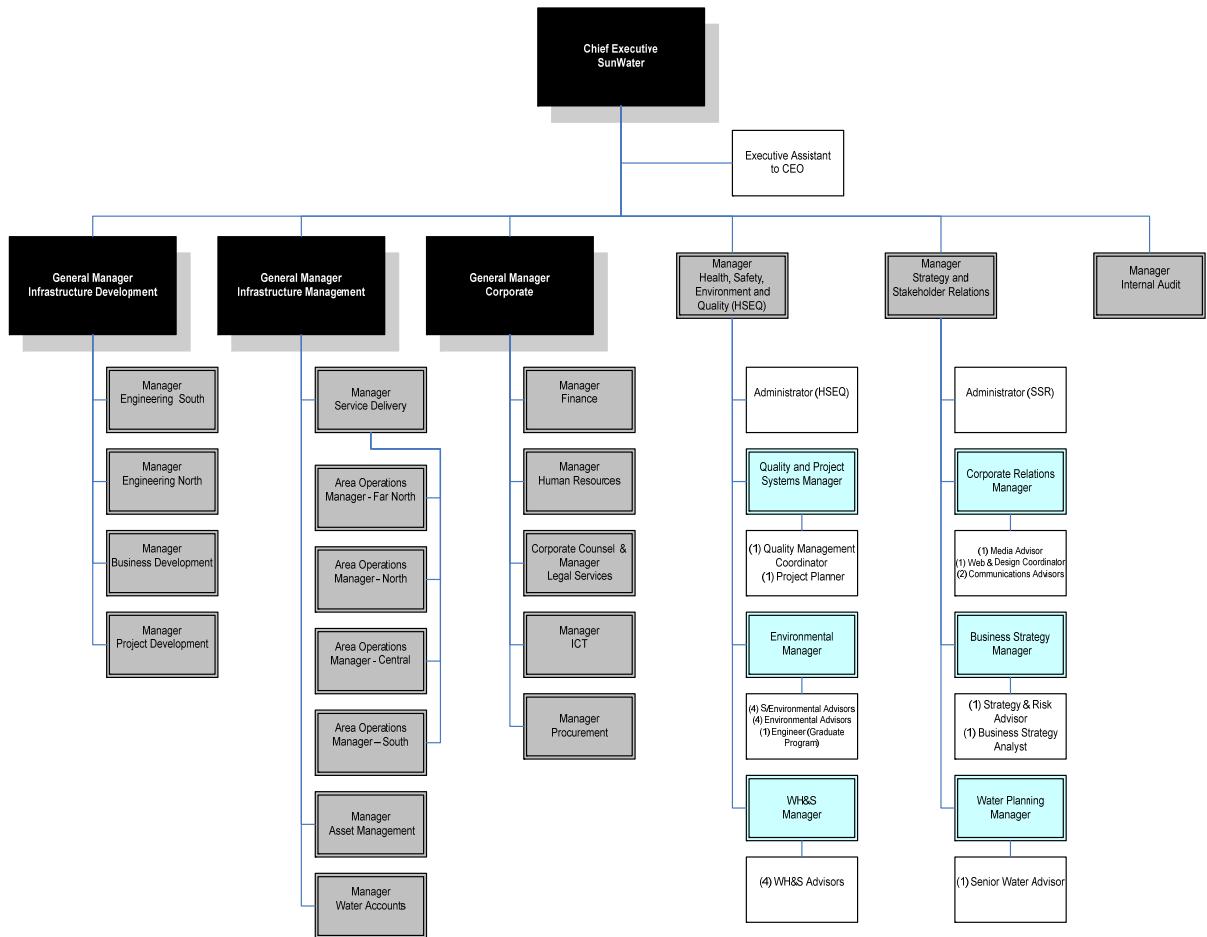
SunWater's total forecast costs (referencing the 2011/12 year as the base reported in 2011 dollars) comprise \$137M. This includes all routine and non routine regional and centralised costs. Of this total centralised cost account for \$38.7M or 28%:

The \$38.7M in centralised costs comprise a number of different activities, including functions that might normally considered 'administration' costs (eg finance, human resources, IT etc) as well as functions normally considered 'operational' (eg customer service, billing, asset management, dam safety, hydrographic services, etc).

Only \$20.2M or 52% of the \$38.7M in centralised costs are allocated to bulk water and distribution systems, with the remainder being allocated to activities unrelated to irrigation pricing. The basis for this allocation is set out in the following sections, while Attachment 1 presents a detailed description of the activities and resourcing.

SunWater's organisational structure provides an overview of how resources have been organised.

Figure 1. Organisational structure



2.2 Services

SunWater owns and operates a diverse suite of water infrastructure assets, comprising:

- 23 bulk water supply schemes, involving 19 major dams and 63 weirs and barrages;
- eight distribution systems and six industrial pipelines, involving 2500km of pipelines and open channels and 730km of open drains;
- two potable water treatment and distribution networks; and
- one hydroelectric generator.

SunWater also provides facility management services to three wholly owned subsidiary companies as well as other water infrastructure owners across Australia. The scope of these activities and their relevance to irrigation pricing is set out below.

Table 1. Summary of activities, assets and their relevance to irrigation pricing

Activity	Costs are attributable to irrigation pricing?	Scope, including other users	Assets involved
Bulk water supply	Yes	Other water access entitlement holders, including local governments, mines, power stations and industry	Water storage and related assets in 23 water supply schemes. However, irrigators are only supplied in 22 of those schemes.
Distribution	Yes	Some minor users in other sectors	There are 8 distribution systems, which comprise pump stations, open channels, pipelines, regulating structures etc In some networks, drainage services (and assets) are also provided.
Other activities			
Pipelines	No	Mines, power stations, local governments	Pump stations, pipelines. These are owned by SunWater as well as its subsidiaries.
Hydro	No	Produces electricity for sale into the grid.	Hydro-electric plants located at dams.
Water trading	No	Involves trading rights through temporary trades, leases or outright sale	SunWater's water access entitlements held for trading purposes.
External contracts	No	Operating and managing assets owned by other parties, including mines, other water suppliers, and SunWater subsidiaries.	No SunWater infrastructure involved.
Consulting	No	Involves consulting services to external clients, mostly in relation to engineering aspects of water infrastructure.	No SunWater infrastructure involved.
Development projects	No	Involves asset augmentations or new infrastructure projects. Costs are recovered from new users.	Typically new pipelines and storages.

These various activities are internally organised in SunWater's financial systems as 'service contracts'. There are a total of 62 service contracts, which include the 22 bulk

water schemes and eight distribution systems related to irrigation services. Hence of the 62 service contracts, 30 relate to irrigation pricing.

For the purpose of this paper, SunWater's assets and activities (or service contracts) have been categorised in accordance with the above table, namely:

- Bulk Water (22 service contracts);
- Distribution (8 service contracts); and
- Other activities/assets (32 service contracts).

For the purposes of determining the maximum allowable revenue (MAR) for bulk water and distribution services, the cost base for each must be determined. This requires the allocation of the centralised costs across a number of different activities.

This is discussed in the following section.

3 Approach to Cost Allocation

This section sets out SunWater’s approach to allocating costs to assets and activities. This is particularly important given SunWater’s activities go beyond bulk water and distribution.

3.1 Causality

SunWater has adopted a three-tier approach to determining the cost base for its assets and activities, depending on the extent of causality of those costs and the degree to which they can be assigned to individual activities or assets. These three tiers are:

- Direct attributable costs, where time and expenses are incurred directly in activities benefiting a specific asset/activity. These costs are assigned directly to each asset or activity. For example, a certain percent of a staff member’s time may be dedicated to a bulk water scheme (eg in response to a particular asset management requirement), in which case that percentage of labour cost is allocated to that scheme. These are called **direct costs**;
- Costs that are indirectly attributable, where costs are attributable to a type of activity or asset, but it is difficult to establish a direct causal link to a particular activity/asset. These are called **indirect costs**. For example, some functions such as water accounting, hydrographic services and dam safety only relate to bulk water, and are allocated accordingly. This means that distribution systems are not allocated any costs for these activities. These indirect costs are allocated in proportion to total labour costs for each asset/activity; and
- Costs where there is no direct causal relationship with individual or types of assets or activities. These are called **overhead costs**. Importantly, these costs are not just administration or corporate costs, but the residual costs that cannot be allocated as direct or indirect costs. These are allocated to all bulk water, distribution and other assets/activities according to the proportion of total labour costs involved.¹

Costs are allocated to operating activities as well as capital expenditure using the same driver.

The rationale for adopting labour as the basis for cost allocation is set out below.

¹ While labour is the major driver, a small portion of overhead costs are assigned to non-labour costs (excluding electricity) using a 5% loading for these costs. For example, if the purchase of chemicals costs \$100, \$5 in overhead is allocated to that purchase in recognition that the purchase and use of materials also has some bearing upon centralised costs. This loading is not applied to large development and dam safety projects, costs such as procurement and legal are directly charged and hence it is not necessary to apply the 5% loading.

Insurance costs are allocated using a different methodology reflecting relevant cost drivers. The treatment of insurance costs is set out in detail in Attachment 1.

3.2 Rationale

SunWater has adopted labour as the driver of indirect and overhead costs² on the basis that it is the best measure of activity and effort, and as such a proxy for causation.

SunWater has also had regard to the approach approved by the Independent Pricing and Regulatory Tribunal (IPART) for State Water Corporation (SWC), which faced a similar situation in needing to allocate centralised costs to a range of water supply schemes throughout NSW. In this instance, IPART endorsed SWC's proposal to allocate costs to each scheme (Valley) based on the proportional number of full time equivalents (FTEs).

SunWater has adopted labour costs, rather than FTEs, as the relevant metric, on the basis that labour resources are often shared across various assets. However, both approaches relate to internal staff resourcing.

In conducting its assessment, IPART undertook a review of the current composition of SWC's operating costs to better understand its key cost drivers. This review found that across all Valleys, salaries and wages accounted for 53% of total operating expenditure.

IPART concluded that salaries and wages were a key cost driver and accounted for a significant portion of SWC's total operating costs. Atkins/Cardno also supported SWC's proposed cost allocation method. SunWater has similar cost characteristics, where labour is also the dominant operating cost at 43% of total costs. Labour accounts for 53% of SunWater's total costs when electricity is excluded.³

Allocating indirect and overhead costs on the basis of labour ensures that a number of non-regulated activities, including consulting and external contracts (eg operations, facilities management) receive a reasonable proportion of costs, as these activities predominantly involve labour costs.

This is reflected in the significant allocation of costs to other activities, as set out in the following section.

SunWater therefore submits that labour should be adopted as the predominant driver for allocating costs to bulk water schemes, distribution systems and other activities.

² As set out above, a small amount of overhead is allocated based on 5% of non-labour costs (excluding electricity).

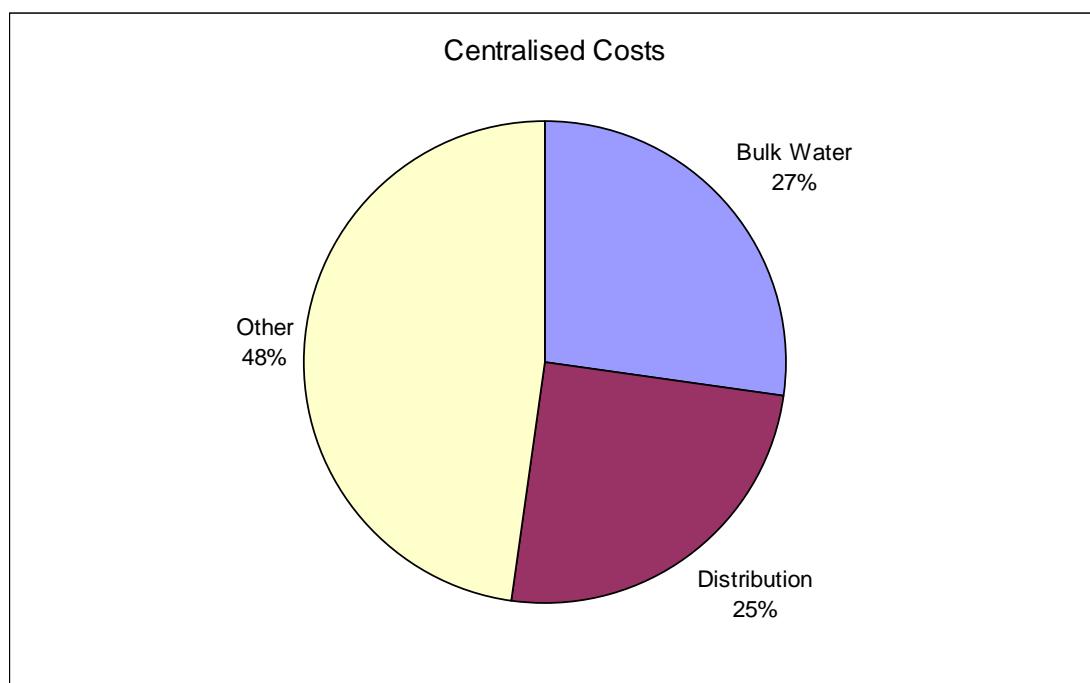
³ As a bulk water service provider, with predominantly storage assets, State Water's electricity costs would be relatively very small.

3.3 Outcomes

The outcome from SunWater's approach is the allocation of these centralised functions to bulk water, distribution and other activities/assets.

The figure below shows that almost half of centralised costs are allocated to other activities. The data presented represents the forecasts for the 2011/12 year and is considered indicative of the five-year forecasting period, and relates to the allocation of centralised costs to both operating and renewals activities.

Figure 2. Allocation of centralised costs



This means that of the total \$38.7M centralised costs (2011/12), \$10.6M is assigned to bulk water schemes and \$9.6 to distribution systems.

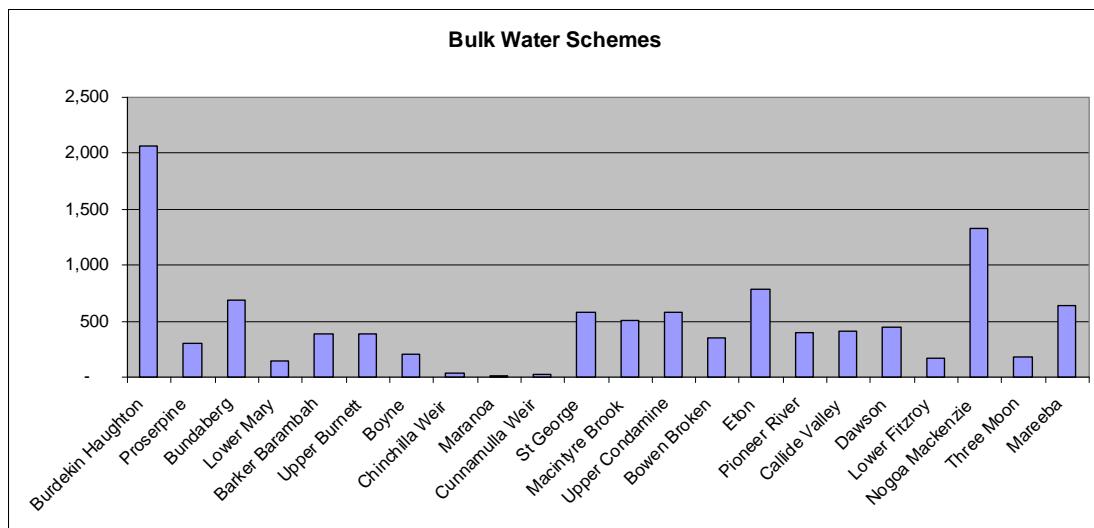
The table below presents the allocation of each centralised function between bulk water, distribution, and other activities/assets.

Table 2. Allocation of functional group costs (2011/12)⁴

Functional group	Allocated to bulk water	Allocated to distribution	Other activities	TOTAL
SunWater Board	88	109	342	539
Chief Executive	152	189	592	933
Internal Audit	37	46	145	229
Corporate Operations	-	-	4,291	4,291
Finance	453	562	1,862	2,877
Strategy and Stakeholder Relations	919	898	285	2,102
Legal Services and Property Management	390	518	651	1,559
Human Resources	392	487	1,536	2,416
General Manager Corporate	123	152	477	752
Information communication Technology	662	821	3,985	5,468
Procurement	130	377	616	1,123
Workplace Health and Safety	585	671	1,196	2,451
General Manager Infrastructure Management	319	386	303	1,008
Service Delivery - Brisbane	897	660	459	2,015
Asset Management	2,428	2,686	942	6,056
Water Accounts	3,039	1,049	791	4,880
Total Centralised costs	10,616	9,613	18,472	38,700

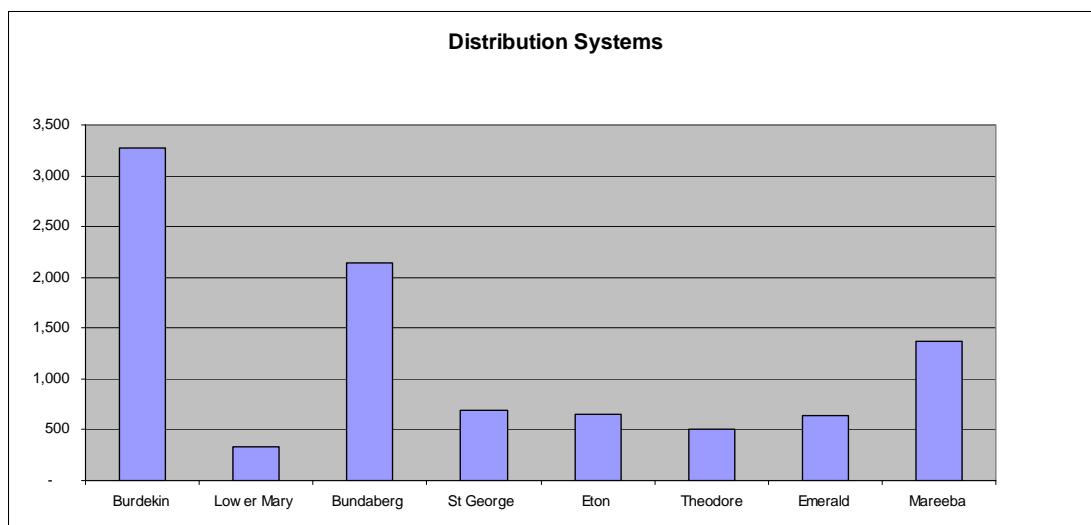
These costs are of course ultimately allocated to individual bulk water schemes and distribution systems. The figure below sets out the total centralised costs allocated to each, based on the 2011/12 forecast year. This includes centralised costs allocated to operating and renewals expenditure.

Figure 3. Centralised costs allocated to Bulk Water Schemes



⁴ Corporate Operations refers to costs incurred as part of SunWater's activities but not allocated to bulk water or distribution systems

Figure 4. Centralised costs allocated to Distribution Systems



The allocation of centralised costs across individual schemes and distribution systems is generally commensurate with their size and complexity. For example:

- the four largest bulk water schemes in terms of water access entitlements and customer numbers are Burdekin-Haughton, Nogoa-Mackenzie, Bundaberg and Mareeba Dimbulah. These four schemes also receive the majority of centralised costs⁵; and
- similarly, there are three dominant distribution systems in terms of size, assets and customer numbers: Burdekin, Bundaberg and Mareeba. These schemes are also allocated the largest share of centralised costs.

In closing, SunWater submits that its method for allocating centralised costs is appropriate and reasonably reflects the causality of those costs. Moreover, SunWater

⁵ Note the Eton scheme also receives a large portion of costs, which reflects the unique assets associated with the scheme include very large pump stations supplying water into Kinchant Dam. Accordingly, there is a significant, additional requirement for technical resources compared to other storages.

submits that its approach reasonably shares centralised costs between bulk water and distribution assets, and its other activities. Indeed, its approach allocates almost half of centralised costs to other activities, meaning that irrigators enjoy significant benefits from the economies of scope and scale afforded by SunWater's diversified business.

In order to demonstrate the reasonableness of the centralised costs in total, a description of these costs and metrics indicating level of activity and effort required are presented in Attachment 1. It is important to note that the cost and activities presented are in aggregate, and only a proportion of those costs is allocated to bulk water and distribution systems.

As a further check on the reasonableness of the cost outcomes for bulk water and distribution, the following section will present a comparison with another water service provider.

4 Comparisons

Assessing the efficiency of a business through comparisons with other entities is extremely difficult as no two businesses are alike. Indeed cost differences will arise due to a range of factors, including:

- the age of assets;
- the scope of services provided;
- the extent of vertical integration;
- the size of the business;
- the density of the network assets and the concentration of customer connections;
- number of customers; and
- geographical or site-specific factors.

SunWater anticipates that the QCA will review its operating costs, including centralised costs, through an independent review of those costs. In carrying out such reviews, regulators (and their consultants) have not relied upon comparisons with other businesses, but have used comparisons as an indicator of relative performance.

Nonetheless, it is possible to make some high-level, *indicative comparisons* of a limited number of costs or cost measures with similar businesses that have recently undergone regulatory reviews. As an example this section presents indicative comparisons for SWC. This section then provides commentary on the relevance of the national performance reporting regime administered by the National Water Commission for making comparisons of centralised costs with SunWater.

4.1 State Water Corporation

Atkins/Cardno undertook a review of SWC's operating and capital costs for IPART, with their report published in November 2009⁶ This section focuses on the information in this report, rather than the IPART determination.⁷

SWC provides bulk water services in 12 Valleys (equivalent to water supply schemes) in NSW. It does not provide distribution services, nor does it own the diversity of assets in SunWater's asset portfolio (eg pipelines, pump stations, open channels etc). The table below presents an overview

⁶ Atkins/Cardno. *Strategic Management Overview and Review of Operating and Capital Expenditure of State Water Corporation 2009*. Final.

⁷ It should be noted that IPART accepted the Atkins-Cardno recommendations, but IPART's report did not provide the necessary level of detail for comparisons to be made.

Table 3. Comparability – SWC and SunWater

	SunWater	SWC
Services		
Bulk water supply	✓	✓
Number of bulk water schemes s	23	12 (Valleys)
Number of major dams	19	19
Number of weirs and barrages	63	51
Distribution Systems	✓	X
Treatment	✓	X
Other		
Number of customers	5000	6000

SWC data referenced from Atkins-Cardno (November 2009). pp 22-23.

A number of indicative comparisons can be made from the Atkins/Cardno review between SWC and SunWater in relation to bulk water costs for SunWater, including direct and allocated costs to SunWater's bulk water supply schemes.

Atkins/Cardno benchmarking analysis

Atkins/Cardno prepared a cross-company analysis comparing the costs of various bulk water businesses. This is presented below.

Table 4. Atkins/Cardno benchmarking of bulk water providers (2009)

Agency	Dams	Weirs	Operation, Maintenance and admin (% of CRC)
SunWater – river regulation	24	84	0.69
State Water Corporation	17	69	0.95
Goulburn-Murray Water – river regulation	14	14	1.91
Sydney Catchment Authority	21	0	2.38

Source: Reproduced from Atkins/Cardno (2009). Table 3.3.

CRC: Current Replacement Cost

River regulation is equivalent to the bulk water service

Atkins/Cardno also compared SunWater at an aggregated level, including distribution systems, with Goulburn-Murray Water which also owns both bulk water and distribution assets. This comparison showed that SunWater's operation, maintenance and administration costs were also lower as a percentage of current replacement cost.

Comparisons based on operating costs as a percent of asset value only provide for very course, high level comparisons. Indeed, Atkins/Cardno concluded that :⁸

it is difficult to identify agencies that are similar in all areas with which to compare costs and performance. These comparisons should therefore be

⁸ Atkins/Cardno. *Strategic Management Overview and Review of Operating and Capital Expenditure of State Water Corporation 2009. Final (2009).* p35.

considered as indicative only. Nevertheless, the comparisons show that SWC is not an outlier.

Similarly, the comparisons made by Atkins/Cardno to SunWater should be also considered indicative. Nonetheless these comparisons show that SunWater had the lowest costs when compared to its peers on this basis.

Aggregate comparisons for bulk water

As set out above, SWC only provides bulk water services⁹. Atkins-Cardno reviewed SWC's operating costs and recommended costs over the regulatory period of around \$38M per annum.¹⁰ By comparison, SunWater's forecast operating costs across 22 bulk water schemes is around \$19.5M/annum, or about 55% of that for SWC.

Any comparison should of course adjust for the relative size and scope of both businesses. As set out in Table 3 above, both SWC and SunWater are very similar when comparing number of bulk water storages and customers, although SunWater has more individual water supply schemes across a larger geographic region.

SWC's total operating costs are for 12 Valleys, which translates to an average cost of \$2.9M per Valley (\$2009/10). This compares to the forecast operating costs for SunWater's 22 bulk water schemes at an average cost of \$0.9M (\$2010/11) per scheme. Given the greater number of SunWater schemes, a more comparable measure would be the average cost across the largest 12 SunWater schemes compared to SWC's 12 Valleys.

The operating costs for SunWater's 12 largest schemes are \$15.8M, or an average of \$1.3M per scheme. This is less than half than the same measure for SWC.

This analysis illustrates that SunWater's total level of costs and its method for allocating costs generates outcomes that are consistent with, and indeed well below, costs for comparable organisations such as SWC.

Corporate costs

Atkins-Cardno reviewed SWC's proposed corporate costs, and recommended efficient costs of around \$5.5M to \$6M per annum for the regulated bulk water assets.¹¹ Corporate costs were defined by Atkins-Cardno as comprising CEO and Board office, and the Finance, Strategy Policy and Compliance, Human Resources, Information Systems and Communication functions.

⁹ SWC also provides some unregulated services. It is understood that the expenditure proposals presented in the Atkins-Cardno report and subsequently accepted by IPART were those allocated to the regulated business only.

¹⁰ Atkins/Cardno. *Strategic Management Overview and Review of Operating and Capital Expenditure of State Water Corporation 2009. Final (2009)* p93.

¹¹ Atkins/Cardno. *Strategic Management Overview and Review of Operating and Capital Expenditure of State Water Corporation 2009. Final (2009)* p90

This compares to SunWater's costs for these same functions as they have been allocated to all bulk water schemes, as follows:

• CEO, Board and Internal Audit:	\$278,000;
• General Manager Corporate	\$123,000
• Finance:	\$453,000;
• Strategy and Stakeholder Relations:	\$919,000;
• Human Resources:	\$392,000;
• Information Communication Technology:	\$662,000
• TOTAL:	\$2,827,000.

This demonstrates that for an equivalent scope of 'corporate' activities, the costs allocated to SunWater's bulk water schemes is well below that accepted as efficient for SWC's bulk water activities.

4.2 National performance reporting

A national benchmarking regime has been developed for water service providers, under the National Water Commission. The National Performance Report published by the Commission presents a range of cost items and other data for rural water service providers including administration costs. However, caution should be applied when making comparisons of administration costs mentioned in this report given the differences between businesses and their assets, and also because the types of costs nominated by participants can vary significantly. For example, the handbook to service providers that guides how they are to provide data refers to administration costs as follows:¹²

All remaining rural water services recurrent expenditure related to rural water service provision, excluding operations and maintenance expenditure. This may include billing, customer enquiries, corporate support, board management, taxes (or payments under TER-taxation equivalent regime) and interest payments. It is recognised that administration activities will vary between services and reporting providers and explanatory comment is invited. For smaller services or particular services (eg. surface drainage), the reporting provider may not be able to separate operation, maintenance and administration costs. In this case, the combined expenditure should be reported against the dominant cost category and explanatory comment provided. Where reporting providers do not account for

¹² National Water Commission. National Performance Framework Rural Water performance reporting indicators and definitions 2008-09 (September 2009) p87

administration expenditure at individual service, service category or sub-category level, or reporting entity level then data should be provided at the reporting provider level.

Clearly there is wide scope for variance in how each business reports administrative costs and the scope of items included. Furthermore, the information is not independently reviewed and hence there is scope for bias in how the data is reported.

Accordingly this report is not considered relevant or useful for comparing SunWater's administrative costs, nor other centralised costs, to other rural water providers.

5 Conclusion

SunWater owns and operates a diverse range of assets across Queensland, and also undertakes non-regulated activities particularly in consulting and external operations contracts. SunWater also undertakes investments in new infrastructure on a commercial basis, outside irrigation price paths.

SunWater has centralised a range of technical and operational functions, and also resources its corporate activities centrally. This generates a critical mass of expertise and allows for consistency and standardisation across the organisation. These centralised functions are located in a range of locations in Queensland. SunWater's approach has led to cost savings and it is submitted that these savings demonstrate that the way in which it has organised its resources and delivered services is efficient. The precise scope and cost for these activities is set out in Attachment 1.

These centralised costs total \$38.7M.

The allocation of these centralised costs results for in some 27% being allocated to bulk water, 25% to distribution systems, and the balance (48%) to other assets/activities.

While comparisons to other water service providers should be applied with caution, it is possible to compare SunWater's bulk water schemes to SWC in terms of total cost and corporate costs. On both measures, SunWater compares favourably.

Attachment 1. Summary of centralised workgroups

This attachment describes each centralised workgroup and their forecast costs. It is important to note that the cost and activities presented are in aggregate, and only a proportion of those costs is allocated to bulk water and distribution systems.

This attachment also describes SunWater's insurance costs, and how the premium costs have been allocated.

Infrastructure Management

The Infrastructure Management Group comprises:

- General Manager;
- Service delivery;
- Asset management; and
- Water accounts.

These are discussed below.

General Manager Infrastructure Management

The costs and activities of the General Manager are administrative support are set out below.

Functions and scope of activities

The General Manager is responsible for the day-to-day performance of the Infrastructure Management Group. Other staff provide administrative support to the group as a whole.

Skills and resourcing

This function requires executive management and administrative skills and resources. It involves one General Manager, an executive assistant and three administration staff.

Forecast costs and allocation of costs

The total forecast costs are set out below.

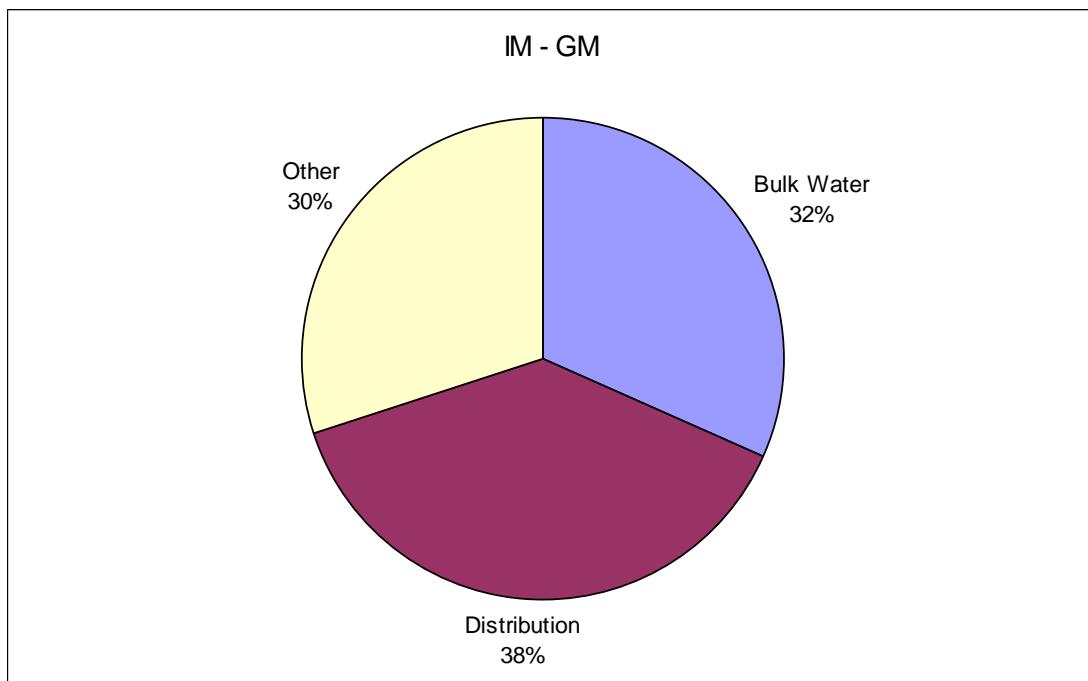
Table A1. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
909	917	917	917	917

These costs are allocated to bulk water, distribution and other activities.

In 2011/12, a further \$99k is charged to the GM from other business groups in SunWater. The resultant \$1008k is allocated as indirect costs to bulk water \$319k (32%) and to distribution systems \$386k (38%) with the balance to other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A1. Proportion of costs allocated (2011/12)



Service Delivery

The service delivery group is responsible for the management of day-to-day operations, the maintenance of service contracts and the provision of services to customers. The group comprises:

- a small, centralised group providing engineering expertise and manage the flood operations centre; and
- local resources that provide the workforce to operate and maintain assets.

Both centralised and local resources are described below. The expenditure forecasts are presented for the centralised group only.

Functions and scope of activities

The key responsibilities of the service delivery group are as follows:

- delivery of services to customers to the standard necessary to meet Customer Standards of Service;
- delivery of maintenance, as detailed in the Opex and Maintenance Plans;
- delivery of minor capital works projects detailed in the Capex Plan;
- ensure safety standards are satisfied;
- reporting and monitoring in relation to on-site environmental management;

- implementation of Emergency Action Plans and the Crisis Response Action Manual; and
- ensuring compliance with ROP/ROLs in relation to operational activities.

Skills and resourcing

The service delivery group is separated into 4 regions – Far North, North, Central and South. Each region is managed by an Area Operations Manager who is required to report to the Manager, Service Delivery, who maintains responsibility for the entire group.

Within each region, the following staff members are responsible for managing and coordinating the daily operations and maintenance of each water supply contract:

- Service Managers;
- Supervisors;
- Storage Supervisors; and
- Senior Operators.

These staff members are also responsible for managing on-site scheme compliance, and safety and environmental management. Each region also includes Schedulers, which are responsible for scheduling maintenance and capital works and arranging for the procurement of materials and the hiring of plant. Technical Officers are responsible for managing capital projects. An analysis undertaken by SunWater suggested that 180 projects were identified as requiring some form of implementation management in 2009/10. This was considered to be a reasonable representation of the baseload of work and thus a good base for planning the workload for the service delivery group.

The group also contains the following staff resources which are necessary to respond to faults:

- 4 engineers, including an Electrical Engineer (HV), and Electrical Engineer (SCADA), a Mechanical Engineer and a Civil Engineer; and
- Technical Officers, who are responsible for managing capital projects.

The group also manages the flood operations centre.

There are 247 FTEs in the service delivery group. The vast majority of these positions are local resources. A small team of four engineering staff is centralised in Brisbane, along with the manager of the group. The centralised functions of the group also include the flood operations centre and the water safety campaign.

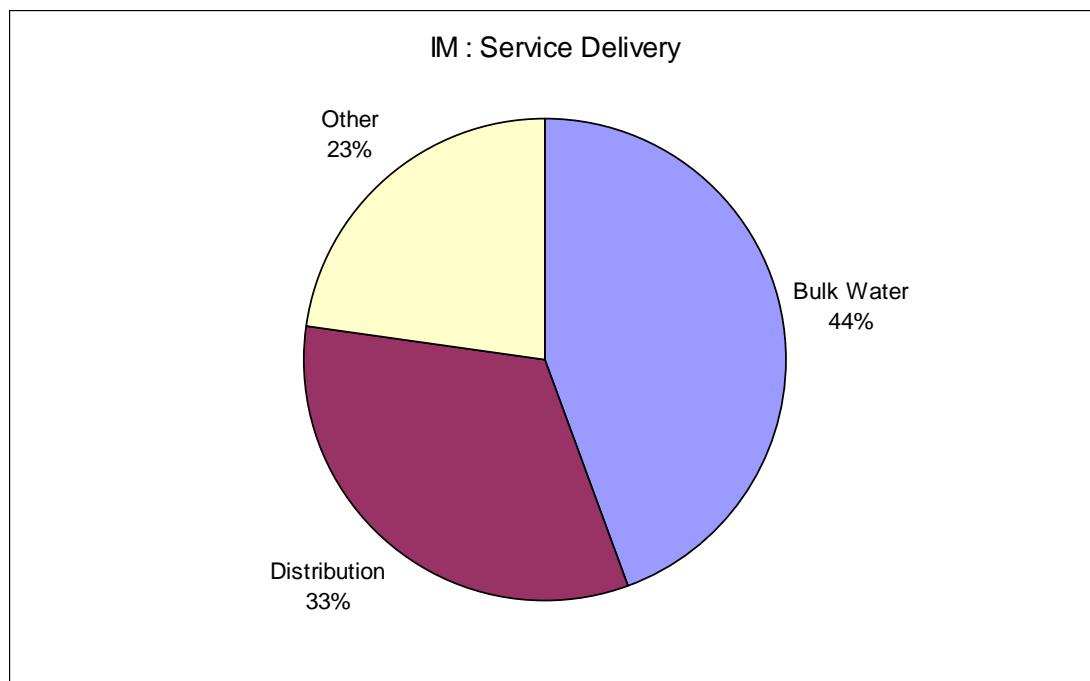
Forecast costs and allocation of costs

The forecasts costs of the centralised components of the group are set out below

Table A2. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
1,562	1,617	1,621	1,614	1,418

In 2011/12, a further \$453k is charged to the service delivery group from other business groups, mainly for the operations of the flood room. The resultant \$2015k is allocated to bulk water (\$897k or 44%) and to distribution systems (\$660k or 33%) with the balance to other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A2. Proportion of costs allocated (2011/12)

Asset Management

As an infrastructure business, asset management is of critical importance for the efficient delivery of services to customers. Moreover, the asset management function requires highly specialised, technical skills and experience to deliver effective outcomes.

Functions and scope of activities

SunWater has a portfolio of over 50,000 individual water infrastructure assets under management. Significantly, this portfolio involves a diverse suite of asset classes, including:

- Dams and weirs
- Offstream and balancing storages

- Fishways
- Pump stations
- Hydroelectric generators
- Pipelines (trunk mains)
- Pipeline reticulation networks
- Open channel distribution networks
- Drainage networks
- High Voltage Switchyards and equipment
- Communication and control equipment
- Flow measurement equipment
- Cranes and lifting equipment
- Hydraulic and Pneumatic systems
- Buildings

The asset management group is responsible for this wide range of assets in respect of:

- asset policy, standards and strategy;
- maintenance planning;
- capital planning;
- asset information and systems; and
- governance over maintenance programs (including inspection and test programs such as dam safety inspections).

The group is also responsible for dam safety governance and other compliance activities related to asset management including compliance with the *Water Supply (Safety and Reliability) Act*.

The group is required to maintain SunWater's Asset Register, SAP WMS, SAP Maintenance Plans, and Work Instructions and manage project closures. Other significant requirements of the group include strategic asset planning, risk management, maintenance history analysis, monitoring and reporting on the delivery of the maintenance program, and compliance reporting.

Skills and resourcing

The asset management function requires significant technical expertise in a range of disciplines and for different asset types. Accordingly, SunWater has organised this function by the various types of asset. This approach fosters expertise and knowledge at the asset level, and ensures critical mass.

The centralised control of asset management functions maximises the potential for SunWater to deliver quality outcomes as it aligns the structure of the group with its functions and processes in addition to preventing the duplication of responsibilities between local and central office staff.

The group consists of 35 FTEs. The table below sets out the resourcing arrangements for the asset management group.

Table A3. Asset Management Group Overview

Technical team	Location	Staff	Relevant assets
Dam Safety	Brisbane	2	19 referable dams
Water and wastewater	Brisbane	1	3 major water treatment plants, various small plants
Pump stations and pipelines	Bundaberg	9	1640km of pipeline 80 major pump stations
Channels and drains	Ayr	7	860 km of channels 730 km of drains
Headworks (Dams)	Brisbane	8	19 major dams, 63 weirs and barrages
Asset information, policy and standards	Brisbane	7	All assets
Management	Brisbane	1	All assets

Forecast costs and allocation of costs

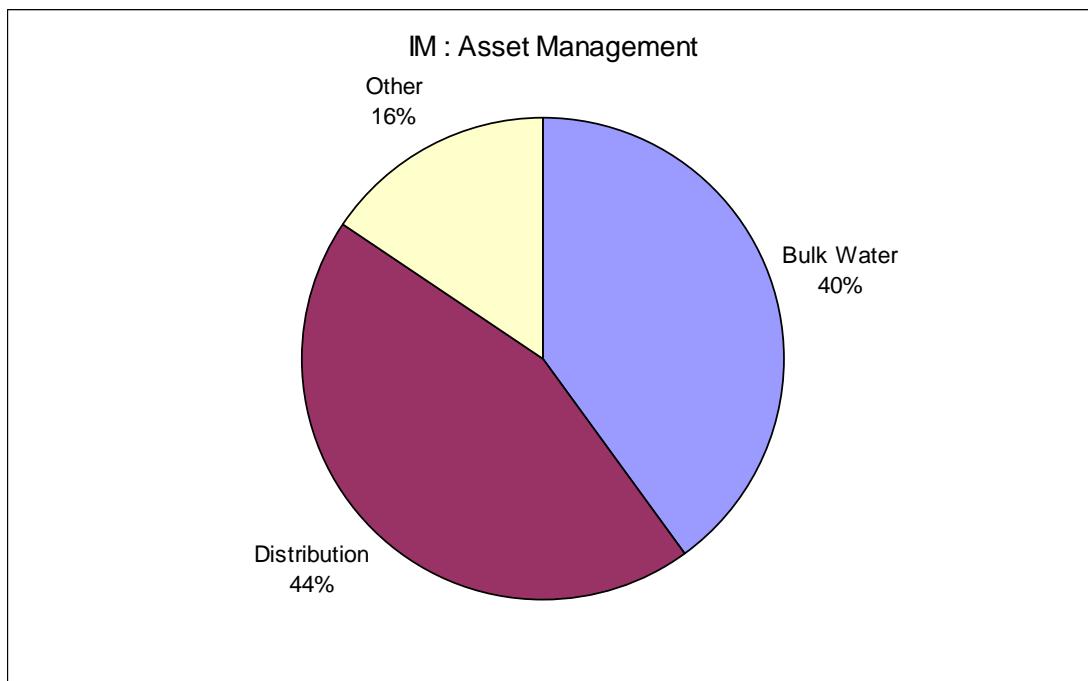
The forecast costs for this group over the regulatory period are set out in the table below.

Table A4. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
5,086	5,129	5,015	5,061	4,912

In 2011/12, a further \$971k is charged to the group from other groups in SunWater. The resultant \$6,056k is allocated to bulk water (\$2,428k or 40%) and to distribution systems (\$2,686k or 44%) with the balance being allocated to other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A3. Proportion of costs allocated (2011/12)



Water Accounts (including capital upgrade of SWIMS system)

SunWater's customers perform transactions, receive quarterly invoices and make account and other enquiries.

SunWater also has 23 bulk water supply schemes, which involve significant compliance requirements under their respective Resource Operations Plan (ROP). SunWater also has operational and compliance requirements in relation to streamflow data, which must be gathered and processed on a daily basis.

The water accounts group's functions relate to these and other requirements.

Functions and scope of activities

There are three workgroups:

- Customer Support;
- Water Accounting;
- Hydrographic Services.

Customer Support

This group performs a range of customer transactions such as billing, account administration and water trades. The group also performs takes all customer phone

enquiries related to these matters. The type and volume of these transactions is set out in the table below.

Table A5. Customer support transaction summary

Transaction	Quantity	Type of activity
Process billing, and manage printing and dispatch of invoices	Quarterly, for over 4000 customer accounts	Requires system checks to ensure completeness of data (eg meter reads) and running of the system process by batch.
Process transfers of water entitlements	Around 500 per annum.	Requires liaison with solicitors, development of contracts with buyer, provision of notices required for register of trade with water entitlements registry, checking of account details etc.
Customer account or data maintenance	Around 3000 items per annum	These largely relate to updates of meter data or metering-related matters, including processing applications for combining meters to a single water account.
Process temporary transfer applications	Up to 2200 per annum	Involves reviewing applications and checking against business rules for approval, as well as system entries to approve the trade and generate correspondence. This function is shared with staff from the water accounting team, who perform checks for ROP compliance. These transaction typically occur in peaks eg towards the end of a water year.
Take customer enquiries (phone or email)	Typically 28 calls per day, up to 65 calls per day in peak periods.	Typically involves customer account enquiries about their invoice or water account. Also involves customer enquiries about other transactions such as temporary transfer, water entitlement trades etc.

The customer support team also undertakes scheme-specific mail-outs or notifications (eg for a shutdown), performs low-level credit management functions, and manages transactions required to deal with customer overuse of their announced allocation.

These water transactions are data intensive and are best managed through a central system. The SunWater Water Information Management System (SWIMS) has been developed for this purpose. This system also generates regulatory information for ROL reporting, such as diversions, announced allocations etc. The SWIMS system is maintained and operated by this group.

The centralisation of this function enables a single specialised team to undertake these transactions and apply consistent business rules, and ensures that customer enquiries and transactions are carried out efficiently and by knowledgeable staff.

Water Accounting

This group's activities include:

- establishing systems and processes to ensure compliant operations of water supply schemes within statutory obligations;
- preparing notification and operational reports as required under each ROP;
- reviewing and approving water transactions such as temporary transfers against the caps set out in the ROP, as part of the overall approval process;
- review and approve other transactions, such as carry over, in eight water supply schemes;
- administering the daily processing of the continuous sharing system in St George and Macintyre Brook (requiring daily processing of inflow, loss and consumption data), as well as production of monthly reconciliation to actual storage levels and generation of account statements for customers;
- calculating the announced allocation in 23 water supply schemes in accordance with the ROP (water sharing rules), and review the announced allocation as required;
- submitting quarterly and annual compliance reports for each scheme (92 quarterly reports and 23 annual reports per annum) as required under each ROP.

Hydrographic services

This group manages SunWater's gauging station network, which involves 90 gauging stations, and provide data supply services and modelling for flood operations. Data from a further 100 gauging stations owned by DERM (where SunWater has access to data under license) is also collected.

The group conducts annual inspections and instrument calibration of the gauging station network, and upload data from each station on a daily basis as required for compliance purposes under various ROPs. The group must also check for failures in the network, and undertake remedial action (usually remotely via the mobile phone network), as well as check the data for anomalies and cleanse the data as required.

The group also maintains data and generate reports as required by the Bureau of Meteorology in accordance with national water accounting requirements.

Skills and resourcing

The water accounts group has one manager and 15 staff, with the staff comprising:

- six staff in the customer support group who are skilled in performing customer transactions and responding to customer account enquiries;
- six staff in the water accounting group, who have a specialist knowledge of all of SunWater's water supply schemes, their operations and the legislative environment; and
- three staff in the hydrographic services group, who have technical skills in gauging station site selection, design, instrumentation and operation, stream gauging and rating table development, hydrologic modelling, remote sensing and continuous time series database system management.

Forecast costs and allocation of costs

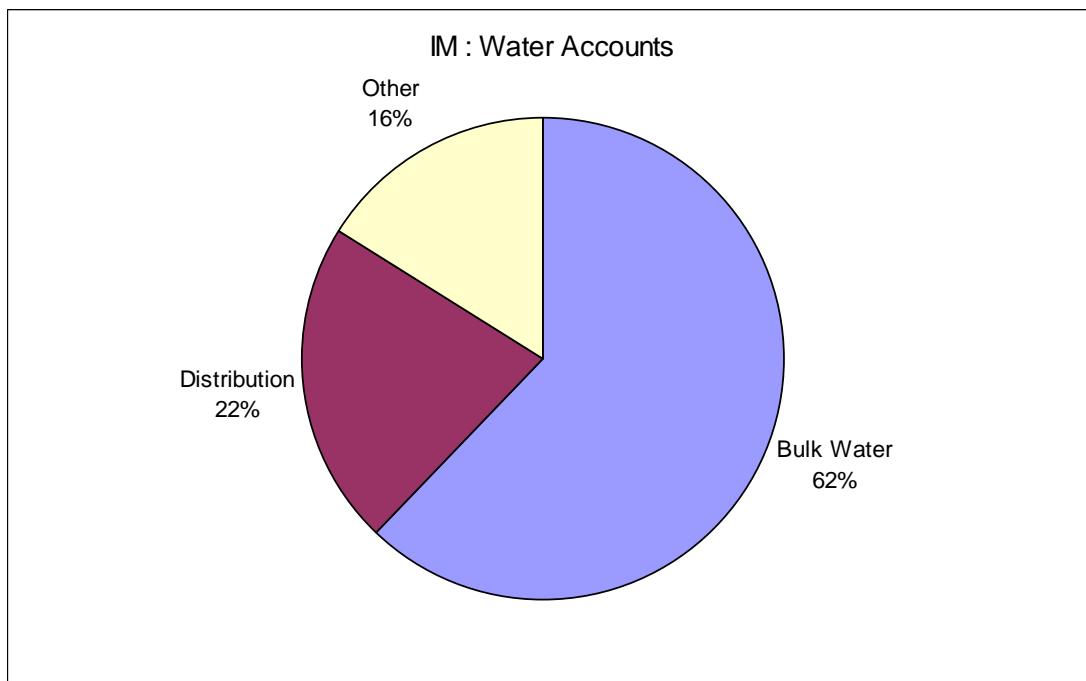
The forecast costs for this group over the regulatory period are set out in the table below.

Table A6. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
3,252	3,727	3,823	3,797	3,770

In 2011/12, a further \$1,628k is charged to the group mainly from Finance and ICT for debt management and customer billing support. The resultant \$4,880k is allocated to bulk water (\$3039 or 62%) and to distribution systems (\$1049k or 22%) with the balance allocated to other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A4. Proportion of costs allocated (2011/12)



Capital costs – SWIMS replacement

As set out above, SWIMS is central to the water management, customer service and billing functions within SunWater. This system was developed progressively between 2001 and 2004, to address SunWater's anticipated business requirements at the time. The functionality for the system is in three components:

SWIMS R1, which comprises:

- Measurement readings;
- Storage information and streamflow; and
- Water quality.

SWIMS R2, comprising:

- Customer account management and billing;
- Scheme management;
- Water accounting, including customer water use, allocation information, water trading, continuous sharing etc;

SunWaterOnline, with functionality including:

- Online account information, including water balances and financial information;
- Online facilities to enter meter readings to check water availability and obtain up-to-date balances; and
- The ability to order water online, linked to operational data for SunWater to schedule and deliver water to meet those orders.

The functionality for SunWaterOnline was developed through customer testing, including focus groups.

An important aspect of these requirements was managing compliance with ROPs, including data gathering and reporting, and managing key transactions such as temporary transfers, within ROP constraints and rules. Since the system was completed, the compliance requirements under new and amended ROPs have evolved.

SunWater has been able to respond to these changes through incremental changes to the system, or the development of off-system solutions.

It is also likely that the changes to the billing functionality will be required as a result of the implementation of further irrigation pricing reforms. The most likely change is the implementation of a fully unbundled pricing regime, where customers on distribution systems will receive separate water charges for bulk water and distribution services. The current SWIMS system, which was constructed to invoice the pricing regime that existed at the time, would require substantial changes to reflect a fully unbundled charging regime.

These compliance and invoicing changes to the system will come at increasing costs to the ‘old’ SWIMS system, which is now reaching the point where it will be more cost-effective to develop a new system. Indeed, SunWater has effectively stopped enhancements to the existing system due to the increasing complexity and cost, and is instead implementing many short-term, off-system fixes with the expectation that a new system will deliver better functionality.

There are also system infrastructure costs associated with the SWIMS system which are increasing due to the aging software technologies. Furthermore, the system architecture is now becoming outdated.

SunWater is also concerned about the stability of the system itself.

PricewaterhouseCoopers (PwC) were engaged in 2008 to review the SWIMS system and suggest a new solution. In their assessment, PwC examined the costs of continuing with the SWIMS system ‘as is’, compared to re-engineering the SWIMS system or implementing an entirely new solution.

The cost of keeping SWIMS ‘as is’ over 5-years was estimated at \$11.3M in total compared to re-engineering the existing SWIMS system at \$12.2M. PwC assessed the costs of two possible solutions as follows:

- PropertyOne: \$9.5M; and
- SAP: \$12.5M

Since this review, SunWater has limited its expenditure on the SWIMS system, and its forecast expenditure to 2016 assumes this continues in the short term. This is well below what would be required if SWIMS was to be retained for the longer term as significant maintenance and modification costs would be required.

SunWater is currently reviewing the system requirements based on adopting an off-the-shelf solution, with minimal customisation. While SunWater is currently finalising its requirements specification for the system, it estimates that the cost of the replacement for SWIMS are be \$7.8M.

SunWater proposes that this \$7.8M is incorporated into the costs for the water accounts group, and recovered through a depreciation allowance over 7 years.

Corporate

All corporate functions are centralised in Brisbane which allows a concentration of specialist skills and resources. The corporate group sets the organisational policy environment and develops and implements systems and processes that align with business needs. Brisbane office also leads the procurement strategy and, in some cases, undertakes the procurement of bulk supply or high-cost items.

The cost element “Corporate Operations” as listed in Table 2 of the main paper above, are not described in any detail, as these are cost that are not to be distributed to bulk water or distribution services and included items like interest and other cost associated with non-irrigation service contracts.

The central resource pool also provides guidance and assistance to regional and local offices as required – for example in relation to HR, procurement¹³ or legal issues.

The CEO Office is also centralised in Brisbane.

CEO Office

The CEO office function primarily relates to the CEO and Board activities.

Functions and scope of activities

The key activities of the CEO office are:

- functions related to the SunWater board of directors
- internal audit; and
- corporate management of the business, including governance, strategy, risk and stakeholder engagements.

Skills and resourcing

The CEO office comprises the Chief Executive, Executive Assistant and the Manager, Internal Audit.

Table A7. Forecast Costs \$'000 (\$2011)

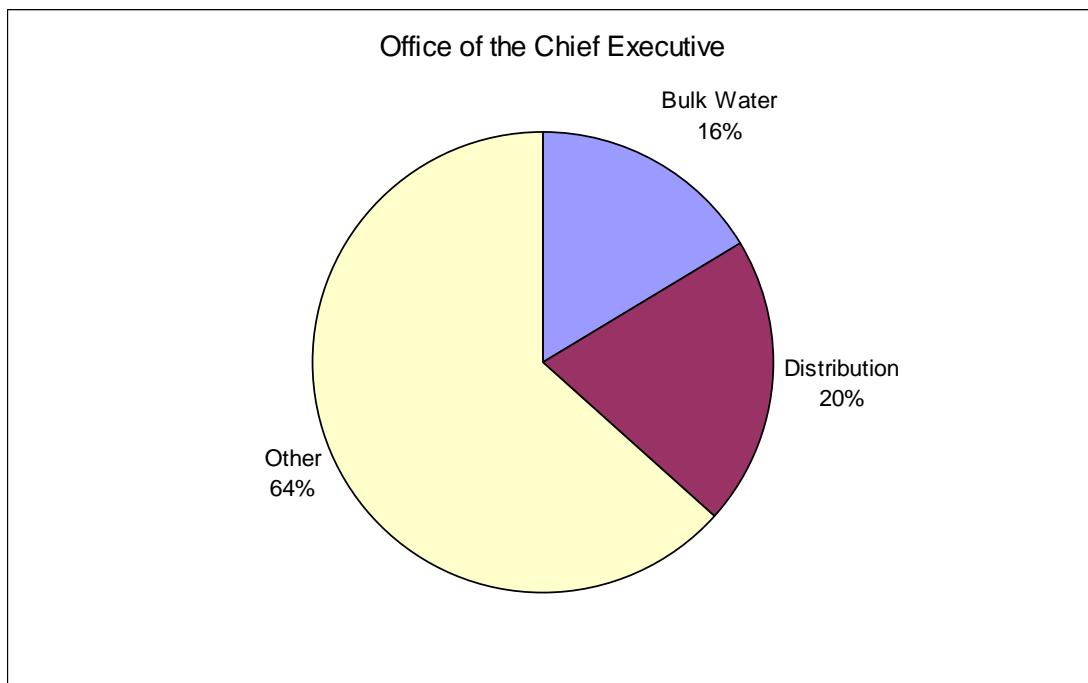
2011/12	2012/13	2013/14	2014/15	2015/16
1,838	1,850	1,850	1,850	1,850

In 2011/12, \$137k is recovered as overhead to other groups and the balance is allocated to bulk water (\$278k or 16%) and distribution systems (\$345k or 20%).

These proportions are similar across the forecasting period, and are presented below.

¹³ Line managers, including those in regional and local offices, are responsible for other procurement within the policy setting requirements set by the Brisbane corporate group.

Figure A5. Proportion of costs allocated (2011/12)



Finance

The finance group provides continual monitoring, analysis and reporting of corporate financial information.

Functions and scope of activities

The services provided by the finance group include the following:

- taxation advice, compliance and management;
- receivables and debtors management;
- insurance renewal and claims management;
- facilities management;
- commercial contracts invoicing;
- cash and funds management including project funding;
- budgeting, financial planning and modelling;
- financial performance reporting and analysis;

- financial training;
- financial and administration policies; and
- accounts payable services.

The business accounting unit is responsible for budgeting, forecasting, project accounting, the production of monthly and quarterly management reports, cost analysis, and financial management.

The financial accounting unit is responsible for the centralised accounts receivable and accounts payable functions. This typically involves approximately 34,000 transactions per annum. Other responsibilities of this unit include asset accounting, monthly board reporting, quarterly shareholder reporting, statutory reporting, monthly BAS lodgements and maintaining accounting policies and processes. These responsibilities span SunWater as well as its three subsidiary companies.

The credit and services unit is responsible for:

- insurance renewal programme and claims management;
- invoicing of commercial contracts and a small number of non-standard accounts;
- managing plant and equipment (approximately 2,315 items valued at \$13.806m);
- credit risk analysis and debt management, which involves following up customers with unpaid invoices (typically over 100 per quarter), and where required entering into and managing repayment schedules, which can range from 25 per quarter to over 100 per quarter;
- managing accommodation and facilities, which involves approximately 9 different sites across Queensland;
- credit management, fleet management and reception functions; and
- management of SunWater's external water trader contract.

The taxation unit is responsible for managing SunWater's taxation responsibilities. This includes providing taxation advice, tax accounting, tax compliance, tax planning, reviewing BAS lodgements and lodging annual income tax and FBT returns.

The centralisation of SunWater's finance functions has produced significant efficiency benefits, particularly in relation to management accounting, accounts receivable, invoicing, debt management and accounts payable.

Skills and resourcing

The finance group consists of just over 25 FTEs. The breakdown of these FTEs is as follows:

- 8 in the business accounting unit, including one manager, five accountants and two administrators;

- 8 in the credit and services unit, including one manager, one senior administrator, one administrator, two receptionists, one senior credit officer and two credit officers;
- 7 in the financial accounting unit, including one manager, one financial accountant, one senior administrator and four administrators; and
- a taxation manager.

The remaining staff resources include a senior manager and 0.5 of a FTE dedicated to a contractor.

The finance group also outsources some services, including aspects of fleet management as well as seeking expert accounting and tax advice from external sources as required.

Forecast costs and allocation of costs

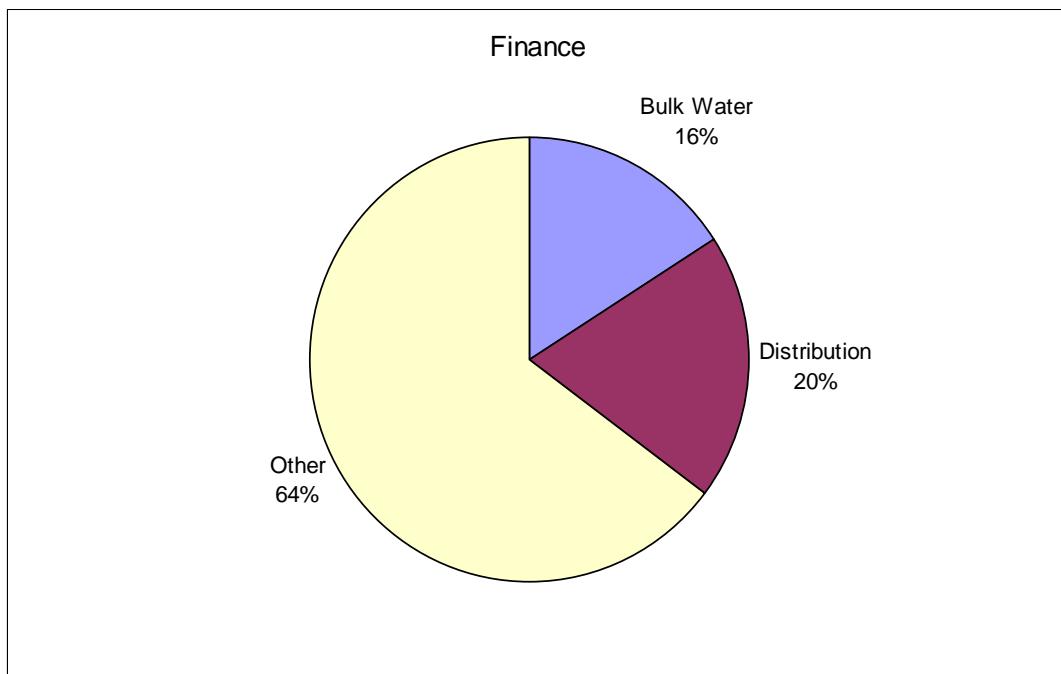
The forecast costs for this group over the regulatory period are set out in the table below.

Table A8. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
3,289	3,322	3,319	3,316	3,202

For 2011/12, \$411k is charged mainly to SunWater's water accounts group for debt management and customer billing services (which are then recovered to service contracts as indirect costs). Of the remaining \$2,878, \$453k (16%) is allocated to bulk water and \$562k (20%) to distribution systems. The remainder is allocated to other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A6. Proportion of costs allocated (2011/12)



Human Resources

The Human Resources Group is accountable for the provision of an integrated range of human resource management services to SunWater including and service support to managers and employees.

A number of Human Resource functions have been centralised to reduce duplication and achieve scale economies. Centralised functions include timesheet data administration, recruitment and training administration. Some of the benefits from this approach include:

- improvement in training delivery through a single, consistent program;
- reduced processing cost and time for timesheet administration and interface costs with the HR system and payroll;
- improvement in efficiency of recruitment processes by streamlining processes and improving the quality of hiring protocols and the rationalisation of the use of external recruitment agencies; and
- improved efficiency through the central management of staff on short-term contract, reducing transaction costs and agency fees. Centralisation has also enabled better procurement arrangements to be developed, including direct

contracting with staff (rather than via an agency) and tailoring insurance requirements to the type of work involved.

Functions and scope of activities

SunWater has a workforce of around 540 full time equivalents. In essence, the human resources function involves setting and implementing policies and practices to define the required skill base, and then attract, retain, develop and train staff accordingly.

The services that are provided by the human resources group are as follows:

- development of human resource policies, strategies, and procedures;
- recruitment services – the Human Resources Group manages all recruitment centrally;
- industrial relations advice to managers, in particular in relation to the application of the enterprise agreement in various circumstances;
- organisational training and development including leadership development;
- workforce planning, including succession and career planning;
- managing of the graduate program;
- employee performance management advice; and
- remuneration management and advice.

There are a large number of tasks associated with each of these responsibilities. For example, the provision of recruitment services involves marketing and attraction; advertising of positions; processing of applications; coordination of the selection process; the hiring process; managing on-boarding and induction; and monitoring the probation process. These activities apply to around 70-80 positions which are typically recruited (internally and externally) annually.

SunWater has successfully negotiated a single enterprise agreement across the whole organisation, which simplifies industrial relations matters. Nonetheless, SunWater has a diverse workforce involved in operations, construction and administration and matters such as overtime, travel and remote accommodation need to be managed in accordance with the agreement. The geographic spread of SunWater's assets also generates issues for staff transfer and accommodation in small or remote locations. This diversity of workforce and IR matters is another driver of workload for the group.

SunWater also operates in a dynamic technical, managerial and regulatory environment, and training and development programs must be developed and implemented to respond to these changes and maintain and grow staff skills. This is also essential for retaining and developing staff, which is of particular importance in locations or disciplines where there is strong competition (eg from growth in the mining sector). Moreover, active management and review of remuneration

arrangements is critical to ensure retention of key skills and resources across the organisation.

Skills and resourcing

The organisational structure for the Human Resources Group includes the following staff members:

- a Manager Human Resources;
- two Administrators;
- two Managers;
 - one for Industrial Relations;
 - one for Organisational Development;
- five Human Resources Advisors;
 - one for Remuneration and Benefits;
 - one for Recruitment;
 - one for Systems Administration;
 - one for Development; and
 - one for Employee Relations.

The Human Resources Group also outsources the following services from external providers:

- payroll;
- delivery of specialist training programs;
- Employee Assistance Program (EAP);
- Staff Benefit Program;
- salary sacrificing;
- evaluation of remuneration for individual employment contract positions;
- investigations (grievance and misconduct);
- special projects;
- staff surveys; and
- salary surveys.

Forecast costs and allocation of costs

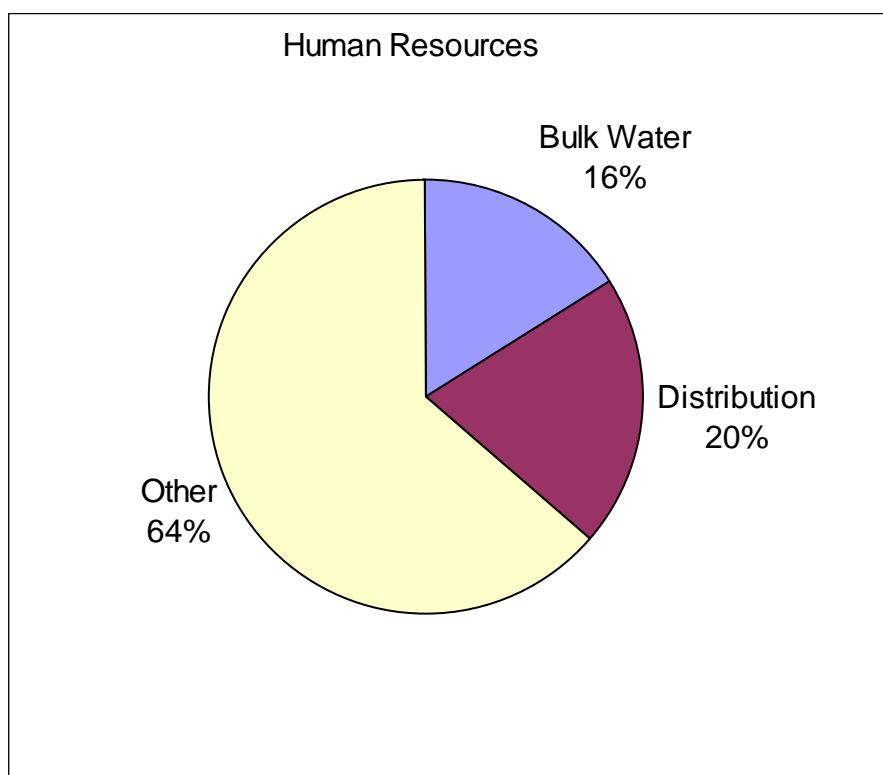
The forecast costs for this group over the regulatory period are set out in the table below.

Table A9. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
2,261	2,228	2,221	2,215	2,208

For 2011/12, a further \$155k is charged from other centralised groups so that costs totalling \$2,416, are allocated to bulk water (\$392k or 16%) and distribution systems (\$487k or 20%) with the balance to other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A7. Proportion of costs allocated (2011/12)



Legal Services and Property Management

This group provides legal advice and related services to SunWater, as well as managing SunWater's property portfolio.

This integration of property with broader legal services has produced significant efficiency benefits, predominantly in relation to the sharing of the administrative support burden and also the development of common precedent agreements and

contracts. It has also increased SunWater's flexibility in managing resources and setting overall priorities.

Functions and scope of activities

The group provides legal advice on a range of matters including:

- overseeing SunWater's compliance program, for compliance with changes to legislative and regulatory requirements;
- developing and maintaining standard water supply contracts (these generally apply irrespective of the type of user);
- developing contractual arrangements for new infrastructure investments;
- establishing / reviewing contracts for procurement of services;
- approvals required for new infrastructure (eg planning approvals, native title, cultural heritage etc);
- dispute resolution and incident investigations;
- industrial relations;
- corporate governance;
- providing ongoing training to the business in key legal concepts and legislative changes;
- participate in and advise on insurance matters, including claims and renewal; and
- managing SunWater's property portfolio and administering all property transactions.

SunWater has recently experienced a spike in its litigation requirements with several major cases running concurrently. It is expected that the work associated with these cases will continue over the next two years. The workload associated with water, compliance and commercial legal work is considered to be fairly consistent.

SunWater has over 4200 different tenures including freehold, perpetual lease and easements.

This includes 161,829 ha of freehold land for its dams, including to the flood margin area. SunWater also has tenure for its other infrastructure assets including weirs (wall structure), pump stations, channels, pipelines and drains, as well as access to those assets.

All property-related activities are performed by this group. This includes managing the overall property portfolio to ensure it aligns with business requirements in terms of amount of land and type of tenure. For example, SunWater undertakes a continuous process of optimising its landholdings and ownership footprint to reduce costs, and disposing of land or relinquishing tender requires a series of transactions to be identified and executed.

The group also administers all property-related transactions, including:

- Maintaining a property database;
- Managing the interface with the Government Land Registry and associated Government requirements (eg greenspace strategy);
- Managing applications for access to or construct other infrastructure on or across SunWater's land, including infrastructure related to housing development (eg roads, sewer, stormwater), vehicle access to SunWater roads, siting pumps in SunWater drains and diverting drainage water etc. This requires negotiations with third party applicants in relation to access or infrastructure works to secure agreements which protect SunWater infrastructure;
- Reviewing and keeping up to date a SunWater property policies and procedures;
- Providing property searches and property administrative functions for the business (e.g. conducting land dealing searches or answering queries about issues which appear on title searches);
- Providing access to landholders to the flood margin areas, reviewing rental rates and invoicing rental fees;
- Reviewing rates invoices and land taxes for payment, and monitoring issues such as rateable land values and responding where required;
- Monitoring planning schemes and related policies to discern the impact for SunWater infrastructure; and
- Monitoring development approvals and making submissions where issues arise for SunWater infrastructure.

Skills and resourcing

The Legal Services and Property Management Group consists of:

- Manager of Legal Services and Corporate Counsel;
- two lawyers that specialise in commercial matters;
- one lawyer specialising on dispute resolution matters;
- three lawyers who are dedicated to new development projects;
- a generalist, part-time lawyer operating across the above areas;
- a Property Team, which is managed by a Property Manager with the support of a Senior Property Lawyer, a Property Services Manager and two Property Officers;
- a Senior Legal Assistant who coordinates the provision of administrative support to the Legal Services Group with the assistance of two Legal Assistants.

SunWater has elected to resource its legal requirements primarily using internal resources, thereby reducing reliance on external legal advice and limiting the requirements during peaks in workload, significant matters or litigation, and to complete specialised property work.

Current staffing includes two temporary positions in preparation for two major construction projects, and it is expected that these positions will become permanent if the projects eventuate. However, these costs will not be included in the overheads allocated to irrigation customers but directly charged to these projects.

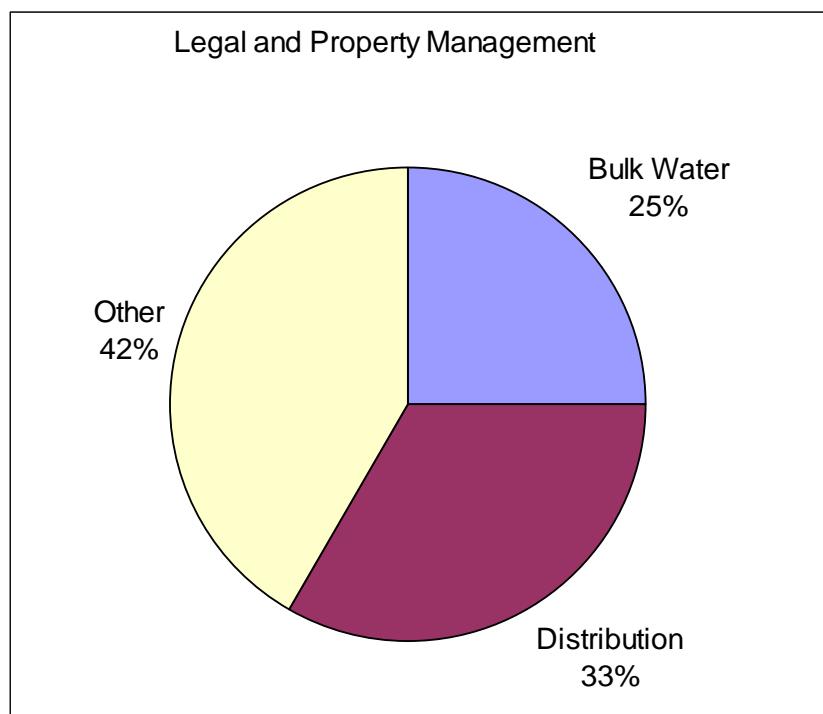
Staff levels in the group are based on historical workload trends, assuming that historical levels of litigation activity will continue during the next price path. An additional FTE may be required to satisfy SunWater's reporting requirements under the new compliance obligations to apply under the ACCC's MDBA Basin Plan.

Table A10. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
1,835	1,857	1,857	1,857	1,857

For 2011/12, \$276k is directly costed to other SunWater groups (including for infrastructure development projects). The balance of \$1,559k is allocated to bulk water (\$390k or 25%) and distribution systems (\$518k or 33%) and other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A8. Proportion of costs allocated (2011/12)



Information and Communications Technology

The Information and Communications Technology (ICT) Group provides integrated information technology and information management services to the entire organisation and supports a number of key business systems, including:

- SAP, which supports SunWater's financial accounting, human resources, procurement and asset management processes;
- SWIMS, which is used to account for customers' water use against their entitlement, trade water between customers, billing and manage customer's accounts;
- the SunWater Online System, which is the customer portal to managing their water allocations and accounts;
- the Data Transfer Management System, which is used to deliver a range of water information to the Bureau of Meteorology in accordance with the Water Act 2007.
- the Hummingbird electronic Document and Records Management System, which is used to store and manage business documents; and
- the ArcGIS Geographic Information System supporting terrain modelling and spatial applications.

The operation and maintenance of these systems is critical to the operation of water assets, regulatory compliance, asset management and financial management and reporting.

Functions and scope of activities

The core functions are:

- a service desk providing a 'one stop information shop' in relation to information technology and information management for incident reporting, service requests and advice;
- central management of a common operating environment;
- infrastructure support for business systems, desktop productivity and networks (both data and voice), including forward Information Communications Technology planning, purchasing, support, maintenance and disposal;
- business system analysis and delivery of new business systems;
- guidance and advice on information management; and
- information governance.

The group comprises an information services unit and systems unit.

The information services unit maintains the information and records management policy, manages SunWater's obligations in relation to freedom of information and

privacy, and also manages SunWater's intellectual property. The group also has a policy function in relation to information and communications technology.

The systems unit provides technical support and enhancement for a range of corporate applications, the provision of business analysis services, and project management of system enhancements.

The unit also supports the technology infrastructure, which includes data and voice networks, servers, storage, security and desktop management. The support provided includes first line user support for all systems, and the provision and support of network services and infrastructure such as servers, printing, email, and internet connectivity.

The implementation of a Business Intelligence tool for the SunWater Finance team and the replacement of SunWater's website and supporting content management system have represented key recent developments in SunWater's ICT group. These initiatives have supported greater efficiency in the centralised Finance function and a reduction in ongoing costs for the support of SunWater's website.

The centralisation of SunWater's regional servers and the replacement of the majority of PCs with "thin client" devices are part of a key efficiency improvement initiative that is underway currently to support reduced ICT staff and system support costs whilst maintaining the level of support to end users in the business.

Skills and resourcing

There are 27 FTEs in the group.

The information services unit consists of one manager and three administrators. This area is responsible for SunWater's information management, records management and library services.

The systems unit consists of one manager and nine staff dedicated to supporting SunWater's business applications, four system administrators, and four service desk analysts.

There is also a senior manager, one administrator, two project managers and an enterprise architect who are responsible for determining and implementing ICT strategic initiatives and governance.

When the level of project activity exceeds the internal capacity or for ICT projects requiring specialist technical expertise, project managers will be outsourced. Development for the SAP system is typically delivered by the in-house staff but major new developments in SAP and the majority of development work for other systems are delivered via contractors. Some system support activities have been out-sourced and new systems may be delivered on in-house servers or by service providers that host these applications.

Forecast costs and allocation of costs

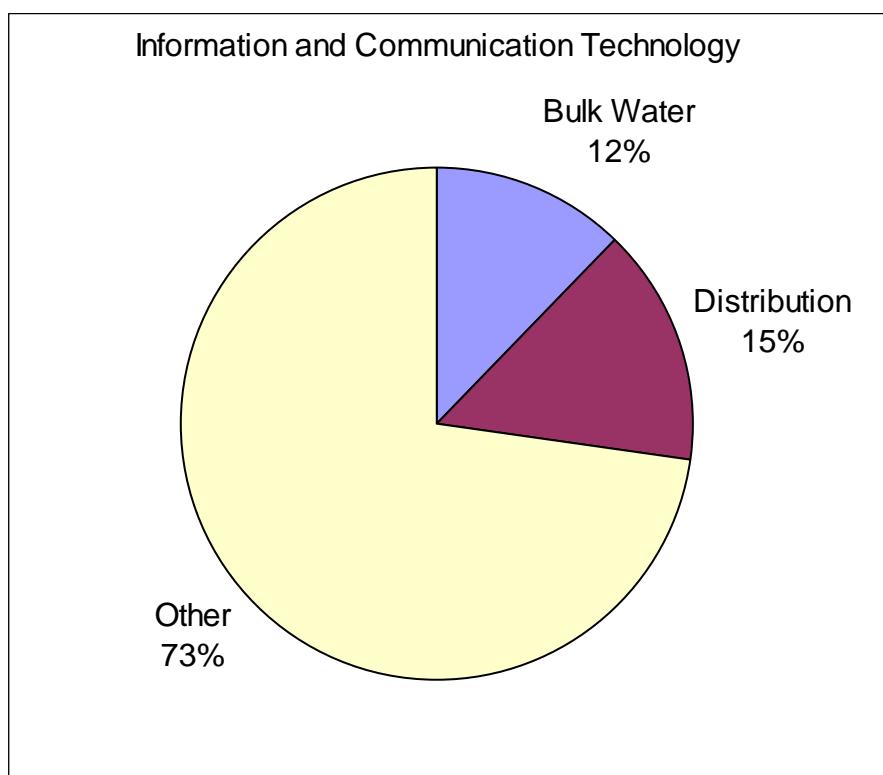
The forecast costs for this group over the regulatory period are set out in the table below.

Table A11. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
6,740	6,964	7,288	7,442	6,766

For 2011/12, \$1,272k is charged to other groups and in particular including water accounts for SWIMS support. The balance of \$5,468k is allocated to bulk water (\$662k or 12%) and distribution systems (\$821k or 15%) and other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A9. Proportion of costs allocated (2011/12)



Procurement

SunWater has recently centralised the procurement function to streamline the purchasing process and apply improved practices to generate better value for money.

The group is involved in major procurement activities, including contracts to undertake major renewals works or construct new assets, as well as the procurement of materials (eg chemicals) and services (eg weed control and mowing of channels). The group also administers some contracts with suppliers, including for uniforms, stationary and corporate travel.

Functions and scope of activities

The key functions of the group include:

- managing the procurement process, including development of tenders, standard terms and conditions for suppliers, and the production of purchase orders. This typically involves around 200 tenders and 500 purchase orders per annum;
- undertaking bulk purchasing to achieve discounts;
- procurement of plant and equipment;
- development of significant purchasing plans;
- strategic planning;
 - development of Corporate Procurement Plan and Significant Procurement Plan;
 - performance measurement;
 - development of policies and procedures and standard conditions of contracts;
 - implementing procurement improvements;
- training and advice;
 - maintaining purchasing certification register;
 - coordination of procurement training; and
- administration for contracts, including providing support for project managers;
 - managing commercial administration such as insurances and bank guarantees;
 - progress payments administration for major contracts;
 - managing disputes;.

Skills and resourcing

The group comprises a manager, five project procurement staff, four general procurement staff and a position providing administrative support.

Forecast costs and allocation of costs

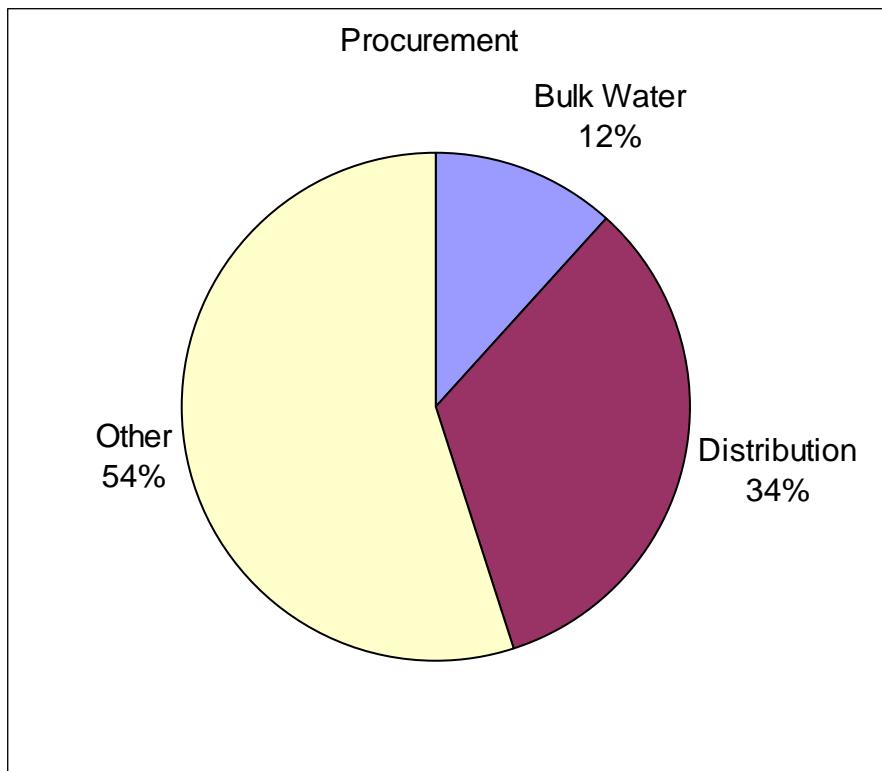
The forecast costs for this group over the regulatory period are set out in the table below.

Table A12. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
1,231	1,259	1,258	1,256	1,255

For 2011/12, \$108k is directly charged to other groups with the balance of \$1,123k allocated to bulk water (\$130 k or 12%) and distribution systems (\$377k or 34%) and other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A10. Proportion of costs allocated (2011/12)



Health, Safety, Environment and Quality

The health, safety, environment and quality (HSEQ) group is responsible for managing SunWater's workplace health and safety and environmental obligations and risks. The group is also responsible for SunWater's quality systems, including for project management.

Functions and scope of activities

The key functions of the group include:

- maintain internal policies, procedures and standards across SunWater in relation to workplace health and safety and environmental compliance;
- identify and implement business improvement measures for project management, including for delivering capital works and the renewals program;
- implement accredited systems, in particular for environmental management, as part of a prudent approach to environmental management;
- develop and implement internal staff and management education and training programs;
- provide expert advice on the installation of safety-related equipment or rectification of identified safety risks;
- provide specialist advice in relation to workplace health and safety and environmental compliance for major capital works;
- conduct regular audits for compliance with standards and procedures;
- generate management reports on compliance and use reporting tools to identify problem areas and priorities for improvement;
- provide support and advice for SunWater's crisis management systems and procedures;
- monitoring related legislative requirements and implement adjustments to SunWater's systems and policies as required; and
- support the efficient notification, assessment reporting and investigation of incidents as well as expert review of recommended corrective actions.

These functions are similar to those that would be expected of any workplace, and particularly involving major infrastructure that requires on-site operational and maintenance activities, and also interfaces with the aquatic and terrestrial environment.

Skills and resourcing

The group comprises:

- a manager and an administrative assistant;

- an environment group, which comprises a manager (located in Brisbane) and eight technical staff, four of whom are located in Brisbane and four in regional offices;
- a workplace health and safety group, which comprises a Brisbane-based manager and four technical staff one of whom is located in Brisbane and three in regional offices; and
- a quality and projects systems group, which has a manager and two staff, all located in Brisbane.

Forecast costs and allocation of costs

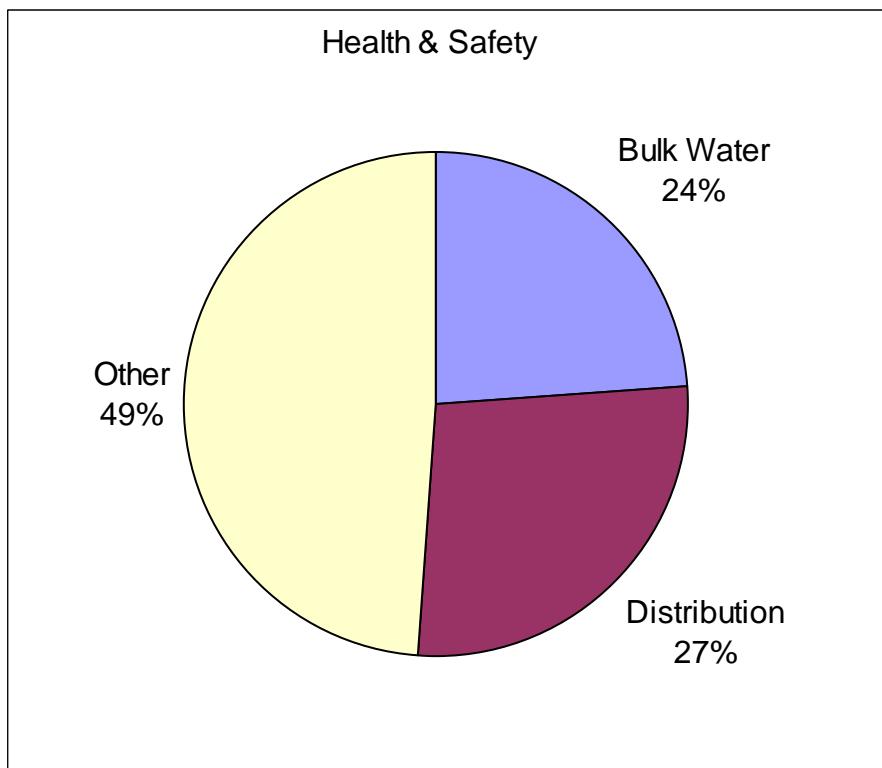
The forecast costs for this group over the regulatory period are set out in the table below.

Table A13. Forecast Costs \$'000 (\$2011)

2011/12	2012/13	2013/14	2014/15	2015/16
2,685	2,716	2,716	2,716	2,704

For 2011/12, \$233k is charged directly to other groups, with the remaining \$2,451k allocated to bulk water (\$585k or 24%) and distribution systems (\$671k or 27%) and other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A11. Proportion of costs allocated (2011/12)



Strategy and Stakeholder Relations

This group comprises the core governance and related functions of the business, and also is responsible for managing SunWater's key regulatory interface with the resource regulator (Department of Environment and Resource Management and the Murray Darling Basin Authority), and economic regulators (the Queensland Competition Authority and the Australian Competition and Consumer Commission).

Functions and scope of activities

The key functions for this group are set out below.

Regulatory interface for water resource regulation

Water resource regulation involves the development of water resource plans and subsequently resource operations plans and licenses that ultimately become compliance obligations upon SunWater. This group is responsible for the interface with regulatory agencies that develop these plans, and its tasks include:

- preparing submissions to the resource regulator on the water resource plans, and in relation to the scope and nature of SunWater's compliance obligations in particular;
- undertaking hydrologic modelling to assess the impacts of various proposals and the compliance obligations for SunWater;
- working with customer representatives to develop, where appropriate, joint proposals of common interest; and
- responding to data requests from the resource regulator in developing its plans.

Regulatory interface for economic regulation

SunWater is subject to economic regulation by the Queensland Competition Authority. Currently the Authority is conducting a review of irrigation prices and significant effort and resources are being directed to this process. This includes developing submissions on key issues (including the issues papers recently released by the Authority) and managing the preparation of cost projections and network service plans.

SunWater is also subject to economic regulation by the Australian Competition and Consumer Commission for water supply assets in the Murray Darling Basin. This requires the provision of information and related requirements under the *Water Act 2007*.

Corporate relations

Like most corporations, SunWater has obligations to shareholders in relation to corporate planning and reporting. SunWater is required to prepare several external reports, including Quarterly Reports to Shareholding Ministers, Biannual Reports to the Office of Government Owned Corporations, Annual Reports to Shareholding

Ministers and estimates briefs. The group manages the shareholder relationship as well as the preparation of corporate governance matters and reports.

This group is also responsible for media enquiries, sponsorships, supporting local initiatives through communication initiatives, and maintaining SunWater's website.

The group also houses SunWater's internal audit function.

Skills and resourcing

The group comprises:

A manager;

- 2 specialist engineers responsible for the interface with the resource regulator;
- a corporate relations group comprising:
 - Manager Corporate Relations;
 - Media Advisor;
 - Web and Design Coordinator;
 - Communication Advisor; and
- A project-based team to deal with economic regulation, which consists of one full-time staff member. Specialist external and internal resources are deployed during major pricing reviews, including the current review by the QCA.

Forecast costs and allocation of costs

The forecast costs for this group over the regulatory period are set out in the table below. This includes an allowance for the next regulatory review (2017) of \$1.5M, which has been split equally over the five year period. This does not include any regulatory fee from the QCA.

This compares to the allowance approved for Gladstone Area Water Board (GAWB) of \$500,000, inclusive of the QCA's regulatory fee of \$220,000. Hence the net cost allowed for GAWB was \$280,000.¹⁴ SunWater's regulatory costs are far higher as it must prepare expenditure proposals for 22 bulk water schemes and eight distribution systems, compared to GAWB which lodges a single proposal for its combined bulk water, distribution and treatment assets.

Table A14. Forecast Costs '\$000 (\$2011)

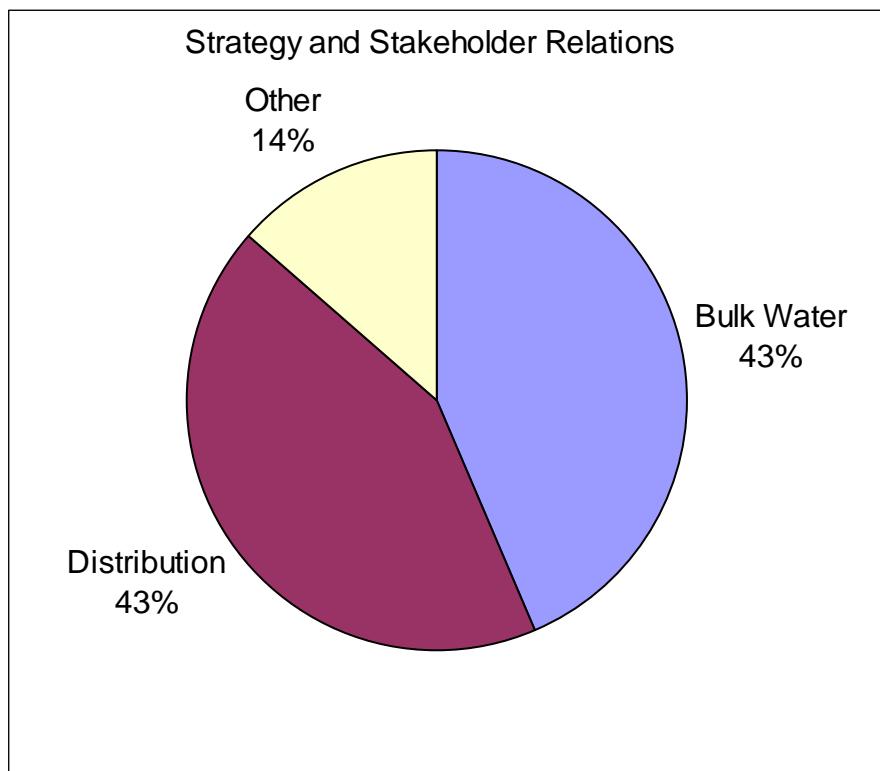
2011/12	2012/13	2013/14	2014/15	2015/16
2,241	2,212	2,212	2,458	2,708

For 2011/12, \$139k is charged to other groups directly. The remaining \$2,109k is allocated to bulk water (\$919k or 43%) and distribution systems (\$898k or 43%) and

¹⁴ Queensland Competition Authority. Final Report: Investigation of Pricing Practices (June 2010) p161

other activities. These proportions are similar across the forecasting period, and are presented below.

Figure A12. Proportion of costs allocated (2011/12)



Infrastructure Development

SunWater has two specialist engineering teams located in Brisbane and Ayr. These teams undertake design projects for irrigation assets as well as other SunWater assets or for third parties. In some cases, these teams also lead project management and delivery (eg for major projects requiring specialist input).

Services are internally charged to SunWater projects (irrigation assets or otherwise), or externally charged to other clients.

This approach enables SunWater to retain a core of expertise and knowledge in water engineering generally, and for its own assets in particular.

SunWater undertakes project investigations and analysis for potential infrastructure investments. This function is located in Brisbane office, and is unrelated to irrigation pricing from existing schemes.

Costs are assigned to water supply assets in accordance with the services forecast to be required. This is largely driven by the forecast renewals program, as the engineering expertise in this group is utilised for design and delivery a large part of the program.

The costs of the infrastructure development group do not generally relate to SunWater's existing bulk water supply schemes or distribution systems, except where resources in this group are used for major projects such as renewals or dam safety.

Infrastructure development activities also attract a significant amount of centralised costs.

Given the costs of this group are not allocated to bulk water and distribution, forecasts have not been presented. However, the outcomes of cost allocation to this group are incorporated into the amounts allocated as 'other activities'.

Insurance

SunWater insures against risks associated with its infrastructure and non-infrastructure assets, and also against risks relating to its staff, directors and public liability.

In procuring its insurances, SunWater obtains the services of a broker to obtain competitive premiums and advise on the prudent scope of insurances and deductibles.

The total premium cost for all SunWater activities and assets for 2011/12 is forecast at \$4.2M, of which \$1,581 is allocated to bulk water, and \$1,392k to distribution systems. The table below presents the forecast insurance costs over the pricing period allocated to bulk water and distribution systems.

Table A15. Forecast insurance costs (\$2011)

Service Contract	2011/12	2012/13	2013/14	2014/15	2015/16
Costs are real in 2011.					
Bulk water	1,581	1,581	1,581	1,581	1,581
Distribution	1,392	1,392	1,392	1,392	1,392
Other	702	702	702	702	702
Overheads	535	535	535	535	535
TOTAL	4,209	4,209	4,209	4,209	4,209

Note the Overheads amount is then allocated to service contracts with the balance of the functional group that it is allocated to.

This compares to the insurance premium allowed for GAWB of \$696,000, increasing to \$805,000 in 2014/15 for a single storage, pipeline distribution system and treatment plants.¹⁵ The insurance costs allocated to SunWater's 22 bulk water and eight distribution systems total around \$2.9M.

Insurance costs have been allocated on a number of drivers. In general:

- Premiums for industrial special risks have been apportioned in two stages:
Assigning premiums to broad asset categories (storages, channels and pipelines) based on an assessment of the premium differential between categories. (This arose when insurers and underwriters sought a relatively higher premium for channel assets than storages and SunWater adopted advice from its insurance broker on the precise differential.); and then
the aggregate bulk water, channel and pipeline premium is then allocated to individual assets proportional to declared value;
- other premiums relating to infrastructure assets are allocated based on declared value;

¹⁵ 15 Queensland Competition Authority. Final Report: Investigation of Pricing Practices (June 2010). p168

- premiums for plant and equipment is assigned to the plant and equipment cost centre, and then allocated to bulk water, distribution and other activities on the same basis as plant and equipment costs generally;
- premiums relating to staff have been allocated firstly to functional groups proportional to the staff numbers, and then to bulk water, distribution and other activities consistent with the allocation of the costs of that group.

The table below presents a breakdown by insurance type.

Table A16. Allocation of insurance premium

Type	Total Premium (2011/12)	Allocation driver