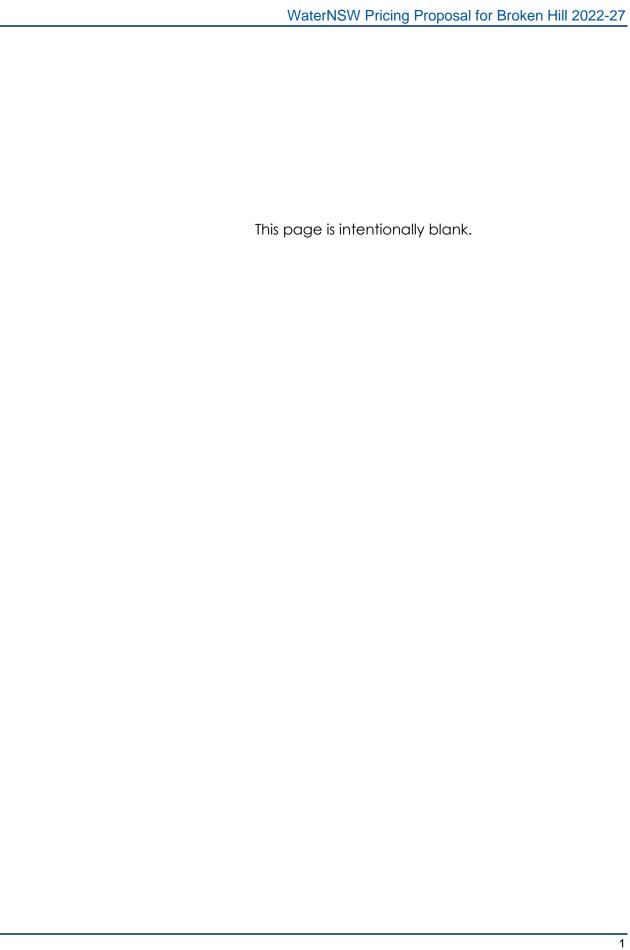


WaterNSW Pricing Proposal to the Independent Pricing and Regulatory Tribunal

Regulatory prices for Broken Hill Pipeline 2022-27

Attachment 1 – Cost Allocation Manual



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Nature, scope and purpose of the cost allocation manual

1.1 WaterNSW services

WaterNSW is a State-Owned Corporation established under the Water NSW Act 2014 and operates under an Operating Licence issued and monitored by the Independent Pricing and Regulatory Tribunal (IPART).

WaterNSW is responsible for supplying the State's bulk water needs, operating the State's river systems and the bulk water supply system for Greater Sydney and providing services to its customers with respect to licensing and approvals, water allocation trades ("temporary trades"), water licence trades ("permanent trades") and water resource information.

We supply two thirds of water used in NSW from our 42 dams, rivers and pipelines to regional towns, irrigators, Sydney Water Corporation and local water utilities. We own and operate the largest surface and groundwater monitoring network in the southern hemisphere and build, maintain and operate essential infrastructure. WaterNSW plays a vital role in improving the availability of water that is essential for water users and the communities throughout NSW. WaterNSW does this through the delivery of its market functions:

- Source water protection protection of the Greater Sydney drinking water catchment to ensure safe water is supplied to Sydney Water, local councils and other distributors for treatment and distribution to their customers;
- Bulk water supply supplying water from its storages to customers in the Greater Sydney drinking water catchment and in the State's regulated surface water systems;
- System operator efficient management of the State's surface and groundwater resources to maximise reliability for users through the operation of the State's river systems and bulk water supply systems, in collaboration with the Murray Darling Basin Authority (MDBA) which directs operations of the River Murray system;
- Bulk water supply infrastructure planning, delivery and operation planning, developing, owning and operating infrastructure to meet customer-defined levels of service and in support of NSW Government policy and priorities to increase the security and reliability of water supplies to end use customers and the communities of NSW; and
- Customer water transaction services providing efficient and timely services to end use customers for water licensing and approvals, water trades, billing and to

meet their water resource information needs with respect to surface and groundwater quantity and quality.

1.2 Purpose

The purpose of this Cost Allocation Manual (CAM) is to describe the cost allocation method that WaterNSW uses to calculate its costs for its separate regulated service streams. These streams include:

Core business, including:

- o Greater Sydney WaterNSW is the main supplier of bulk water in the Sydney region. It manages and protects Sydney's drinking water catchments and catchment infrastructure. It supplies bulk water to Sydney Water Corporation (SWC or Sydney Water) and to three councils (Wingecaribee Shire Council, Shoalhaven City Council and Goulburn Mulwaree Council), and raw water and unfiltered water to minor customers.
- Rural Valleys WaterNSW provides rural valley bulk water services which relate primarily to the capture store and release of water to licence holders across 13 valleys in NSW.
- WAMC WaterNSW carries out on behalf of Water Administration and Ministerial Corporation certain licensing, water monitoring and billing functions formerly carried out by DPI Water on behalf of WAMC.
- o Broken Hill Pipeline Services.
- Supplementary activities and Other. These are non-core projects, such as those services which do not form part of IPART's pricing determination and whose costs are excluded from the notional revenue requirements set by IPART. This segment consists of supplementary activities that are not included for the regulated business. These activities are externally funded, such as those activities funded by Murray Darling Basin Authority, NSW Government Grant Funded project works, as well as unregulated commercial business opportunities.

Allocation of costs in a shared price-regulated environment is a complex exercise. This Manual explains WaterNSW's cost allocation methodology and describes how WaterNSW:

- Distinguishes between direct and indirect costs;
- Attributes and allocates costs to and within WaterNSW's price regulated and nonprice regulated services; and
- Calculates the costs of the WaterNSW price regulated and non-price regulated services to reflect the costs associated with the provision of each service.

By explaining the accounting basis of how costs have been, or will be, allocated, this Manual will assist WaterNSW in the development of pricing proposals for its four major pricing determinations: Greater Sydney Determination, Rural Valleys Determination, Water Administration Ministerial Corporation (WAMC), and the Broken Hill Pipeline. It also provides more transparency and confidence on how WaterNSW allocates costs.

While there is no regulatory requirement on WaterNSW to prepare a CAM for pricing purposes, we have sought to be consistent with the principles and arrangements set out in IPART's Cost Allocation Guide¹ (Guide) and applicable requirements such as:

- Applicable Australian Accounting Standards (which include Australian Accounting Interpretations);
- Applicable International Financial Reporting Standards;
- Financial Reporting Directions mandated by the Treasurer, including Treasury Circulars and Treasury Policy Papers; and
- Accounting policy legislation, including the requirements of the Part 3 of the Public Finance and Audit Act 1983 (where applicable), Government Sector Finance Act 2018 (where applicable), the associated requirements of the Public Finance and Audit Regulation 2015 (where applicable) and the State Owned Corporations Act 1989.

1.3 Terminology

Cost allocation relates to the attribution and allocation of a service provider's costs to its declared and other services. In developing this CAM, we have used the definitions set out in the IPART Guide and the key terms used are:

- A cost object is any activity or item for which costs are separately measured. Cost
 allocation is the process of identifying, aggregating, and assigning costs to
 specific cost objects. For the purpose of this CAM, each cost object represents an
 individual component required to provide a service. Hence each cost object can
 be assigned to both a system and a service level;
- Direct costs are costs that can be directly traceable to a specific cost object and can be attributed to a particular cost object and hence a service; and
- Costs that cannot be directly traceable to a specific cost object are indirect
 costs. These indirect costs are allocated across our services based on causal
 relationships.

¹ IPART, "Cost Allocation Guide – Water Industry Competition Act 2006, March 2018."

Governance arrangements

2.1 Accountability

This section outlines the relevant accountabilities within WaterNSW for the initial implementation, continued application, maintenance/updates, internal monitoring, reporting and quality assurance of the CAM and separate accounts.

Specific responsibilities for updating, maintaining, applying and monitoring the CAM are managed by Finance and Commercial Services. The group is responsible for timely governance, internal assurance and implementation of the CAM. Finance & Commercial Services will ensure that costs are allocated and reported in accordance with the CAM. This includes:

- Maintaining accounts and making records available for audit review;
- Monitoring the appropriateness of causal drivers used
- Allocation of indirect costs, and
- Assurance i.e. ensuring application and monitoring of costs is in accordance with the CAM.

Table 1 sets out the specific accountabilities and responsibilities for updating, maintaining, applying and monitoring the application of the CAM.

Table 1 – CAM accountabilities and responsibilities

Role	Accountability and/or responsibility	
Chief Executive Officer	Accountable for approving the CAM	
Chief Financial Officer	 Responsible for developing and recommending the CAM to the CEO. Ensuring systems and processes are in place to support the CAM policy. Monitoring CAM outcomes to provide assurance that the CAM outcomes are in line with the CAM 	

Manager Financial Planning & Analysis	Responsible and accountable for applying the detailed principles and policies described in this CAM as the basis for attributing costs to, or allocating costs between WaterNSW's separate regulated service streams
	 Implement the CAM and maintain associated costing procedures and guidelines for staff
	Day-to-day responsibility for updating, maintaining, applying, internally monitoring and reporting on the application of the CAM
All staff	Comply with all relevant costing procedures and CAM guidelines

2.2 Duration and review

This CAM will be considered current and will take effect at the date approved by WaterNSW's Chief Executive Officer. The CAM will remain and be considered current until it is periodically re-issued.

The CAM will be reviewed at the beginning of each regulatory pricing period. A review of the CAM may also occur in the event of major changes to WaterNSW's business that could impact the provision of services or the capture and recording of costs.

These reviews include a comprehensive assessment of the compliance of recorded expenditures with the cost allocation method outlined in the CAM.

Cost Allocation Principles

3.1 IPART's regulatory guidance

WaterNSW has adopted several principles in the development of its CAM. These include the principles outlined in IPART's Cost Allocation Guide, and applicable accounting standards that reflect good practice and regulatory precedent.

3.1.1 The causality principle in allocating costs

WaterNSW understands and interprets this principle to be that all costs (capital and operating) must be allocated to the relevant service which causes those costs to be incurred. More specifically, WaterNSW's four separate determinations are defined both by the type of service and by geographic boundaries.

As a result, direct causal costs are identified at both a service level, geographic system level and an activity level. This concept is extended to a high proportion of operating costs, and further attributed to the specific services within the separate service areas. For example, the cost of maintenance activities used to maintain bulk water storage and delivery infrastructure through the Greater Sydney supply system are directly costed to this service.

3.1.2 Allocating costs where a causal relationship cannot be established

WaterNSW interprets this principle to mean where a causal relationship does not exist, or where it is not practicable to precisely identify and measure causal allocators, it is then necessary to substitute a close approximation to an ideal causal allocation. We use this approach for allocating our indirect common shared costs. This CAM sets out the method for allocating indirect common costs.

3.1.3 Total costs to be allocated

WaterNSW interprets this principle to be that the sum of costs allocated to each service must reconcile with the total costs outlined in our audited statutory financial accounts. Accordingly, we have imbedded a cross-check in into our cost allocation modelling, as part of broader governance and quality assurance processes.

3.1.4 A cost should only be allocated once

WaterNSW interprets this principle to be that costs within a service, as well as between services, should only be counted or allocated once. There should be no double counting or duplication of costs across WaterNSW's separate determinations and service areas.

As with the cross-checks/governance outline in the 'Total costs to be allocated' principle, a separate reconciliation of costs with IPART's determined costs ensures that costs are only allocated once, precluding double counting or over allocation, demonstrating that cost have been neither created nor lost as a result of the allocation.

3.1.5 Periodic review of the basis for cost allocation

WaterNSW understands this principle to be one in which allocators should not be regarded as static or permanent, and as such causal allocators should be updated as often as is practical, to ensure casual relationships remain relevant. As part of WaterNSW's governance process, we will update allocators periodically as technologies and operations trigger change or improved allocators become available. The updating of allocators will occur through the periodic review outlined in section 2.2.

3.1.6 Can be practically implemented

This principle is in addition to those outlined by IPART in its guidance. WaterNSW interprets this principle to mean that although ideal allocators are always preferred, in some cases it may not be practicable to precisely identify and measure causal allocators of cost without undue cost and effort. In such cases, WaterNSW will adopt a proxy allocator based on our understanding of the nature of the expenditure and an expectation that the proxy will result in allocations that are consistent with those that would result from an ideal causal allocator.

4 WaterNSW's method for allocating costs

4.1 Cost capture system

WaterNSW's Microsoft Dynamics 365 Financial Management System is used to capture all costs.

WaterNSW's chart of accounts and costing systems have been established such that costs (both operating and capital) can be separately accounted for and reported in accordance with the CAM and regulatory requirements. The chart of accounts structure enables costs to be attributed directly to, or to easily allocate costs between the following service categories:

- Greater Sydney services
- Rural Valleys services
- WAMC;
- Broken Hill Pipeline services; and
- non-core projects.

Each account string in the general ledger comprises 8 pieces of information, whereby each piece assists in grouping of costs for reporting by: Project, Valley, Segment, Activity as well as other reporting segments as outlined in Table 2 below.

Table 2 – General ledger account information

Level	Segment	Format	Description
1	Responsibility centre	4 digit code	The area of financial responsibility assigned to a manager or supervisor.
2	Project and Phase	11 digit code	8 digits project, "." separator, 2 digits for phase1x phases are Capex, .2x and .3x are Opex phases
3	Valley	2 digit code	This is the location the project will be delivered according to mapped valleys
4	Activity centre	2 digit code	Type of work being performed e.g. asset inspections
5	Pricing service	4 digit code	Identifies the service category .e.g. Greater Sydney
6	Business Segment	4 digits	Identifies the segment, e.g. Core, core plus
7	Capability	3 digits	Identifies whether Opex or Capex and if Capex what capability

8	Cost item		Type of expenditure e.g. labour, energy, chemicals.
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Projects can have multiple levels using either sub-projects or work orders to capture transactions across project phases. Projects are linked to managing cost centres that are responsible for delivery.

4.2 Overview of cost allocation to the different services

Cost allocation is a step-by-step process that involves:

- Identifying and defining the cost objects to which costs will be assigned;
- Identifying and classifying costs as direct or indirect;
- Tracing direct costs and attributing them to the cost objects;
- Applying a method of relating indirect costs to the cost objects i.e., allocating these to cost objects using appropriate allocators or cost drivers.

WaterNSW's costs are fully allocated to activities and to each pricing determination for regulatory purposes. The following figure is a diagrammatical representation of the broad methodology used to apportion costs across activities and submissions.

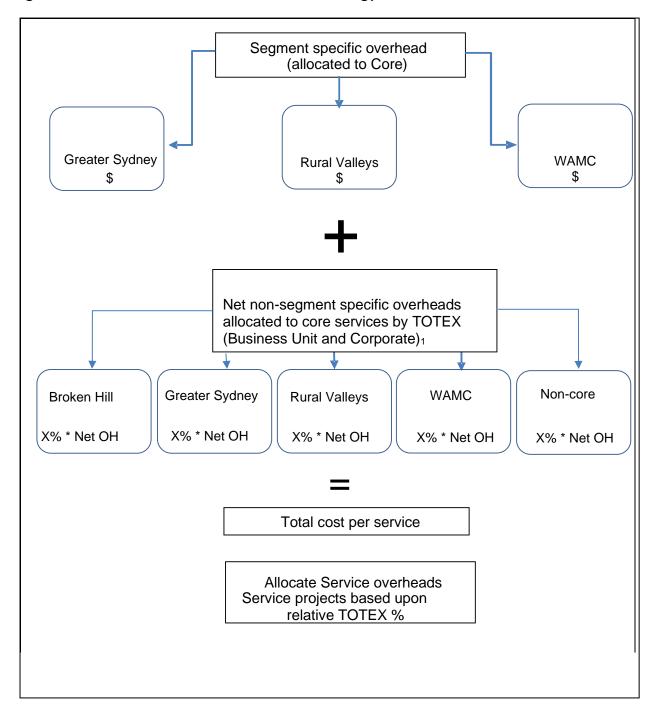


Figure 1 – WaterNSW's cost allocation methodology

Note: 1 Non-segment specific corporate overhead is post the allocation of corporate overheads to capital expenditure. Further detail on net non-specific overheads is provided in section 4.4.

4.3 Direct opex costs

Labour costs

Timesheets are used to directly attribute labour cost to projects/work orders. Staff members are responsible for attributing labour hours to appropriate projects on a regular basis accounting for all days of activity.

Based on the labour hours charged, direct labour costs are attributed to the appropriate project or responsibility centre by multiplying the number of hours charged by the individual staff member's labour rate per hour.

Non labour costs

Non labour expenses are directly attributed to the appropriate service by coding costs to the relevant project.

Ring-fencing through activity-based costing

All operating costs are allocated into the following four segments:

- Core. This segment consists of the regulated business activities of Greater Sydney and Rural Valleys, WAMC, and the Broken Hill Pipeline. The direct costs of these businesses are tagged and allocated to each of the rural valleys (Bulk water and WAMC services) and Greater Sydney/Broken Hill as appropriate.
- 2. **Core Plus**. This segment consists of supplementary activities that are not included in the regulated business. These activities are externally funded and include investments such as those funded by MDBA and the NSW Government.
- 3. **Other.** This segment represents unregulated business and direct costs are allocated accordingly to the segment.
- 4. Overhead. This includes the overhead costs from business units which are the operational areas within WaterNSW that are responsible for specific functions and service delivery, and corporate overheads which relate to whole of business functions.

WaterNSW has developed a project-by-project approach to allocating costs into appropriate categories for the IPART price reviews.

WaterNSW's Microsoft Dynamics 365 Financial Management System is used to capture direct and indirect costs. Dynamics 365 is supported by inputs from WaterNSW's timesheet programs, and expense claims system.

WaterNSW applies the following process to allocate costs across its IPART determinations:

- Work is undertaken on a project basis. Before a project is created in Dynamics 365, a number of strict expenditure controls must be satisfied. The project manager is required to obtain 'Approval to Spend' (ATS) under the WaterNSW Standing Delegations. An 'ATS' is drafted by the project manager outlining the scope of the proposed project, the proposed expenditure, the proposed funding source and the justification for the proposed project;
- A project is created in Dynamics 365 after the project is approved. The project is mapped to an IPART activity code (such as 'Renewals and Replacements' or 'Environmental Planning and Protection') and a price determination (such as Greater Sydney or Rural Valley). The project manager consults with the finance team on the appropriate classification for the project. The project classification must align with the project drivers identified in the ATS. For example, a project to construct a Fish Passage structure in Greater Sydney will be mapped to the 'Environmental Planning and Protection' IPART activity code and the Greater Sydney determination. This mapping will be supported by an ATS document identifying environmental compliance as a key driver for the project.
- Staff allocate their direct costs (e.g. time and materials) to a project. Direct costs predominately relate to labour, materials and contractors' costs. Direct labour costs are captured in Dynamics 365 and allocated to projects using WaterNSW's timesheet systems. Employees record their labour hours for each fortnight using KRONOS. Employees select a project for each timesheet 'punch'. Timesheets are reviewed and approved by the line manager. Contractor costs and materials are captured and allocated to projects by raising a purchase order in Dynamics 365. The project manager selects the appropriate project for the purchase order.
- By mapping a project to an IPART funding source (pricing determination), the cost
 of the project is allocated to the appropriate IPART determination and
 incorporated into customer charges for the relevant determination.

The allocation approach is summarised in Table 3.

Table 3 – Cost items and basis for allocation

Cost item	Description	Basis for allocation	Costs allocated to
Salary and wages	Salary and wages, associated payroll on- costs and employee/industry allowances	Directly attributed through labour costing to a project	 Greater Sydney services Rural Valleys services WAMC; Broken Hill Pipeline; and non-core projects.
Other Employee related	Other staff related costs such as staff training.	Directly attributed to projects.	 Greater Sydney services Rural Valleys services WAMC; Broken Hill Pipeline; and non-core projects.
Consultancies	Consisting of consultancy fees.	Directly attributed to projects.	 Greater Sydney services Rural Valleys services WAMC; Broken Hill Pipeline; and non-core projects.
Materials, plant and equipment	Inventory and non- inventory (irregular) items. Includes water purchases, general materials and chemicals, computer hardware and software and energy costs.	The certification process for invoices requires officers to confirm the correct project/ work order is used for the costing	 Greater Sydney services Rural Valleys services WAMC; Broken Hill Pipeline; and non-core projects.
Contractors	Includes hire contracts such as legal services, IT services, maintenance services among others.	The certification process for invoices requires officers to confirm the correct project is used for the costing	 Greater Sydney services Rural Valleys services WAMC; Broken Hill Pipeline; and non-core projects.
Administration	Incorporating expenditure such as minor energy and utilities, insurances, office supplies, property expenses, land tax, council rates among other administrative costs.	Directly attributed to projects. The certification process for invoices requires officers to confirm the correct project is used for the costing	 Greater Sydney services Rural Valleys services WAMC; Broken Hill Pipeline; and non-core projects.

4.4 Overhead and shared opex costs

WaterNSW uses direct total expenditure (TOTEX) as the cost allocator for its shared opex costs. TOTEX is a concept that has been widely adopted by regulators and utilities as a regulatory measure of expenditure. TOTEX is defined as the sum of total operating expenditure and total capital expenditure.

TOTEX satisfies the allocation principles set out in Section 2 as:

- Directly attributable TOTEX expenditures are readily observable;
- The use of directly attributable costs as an allocator for indirect/shared costs is a well-established approach with regulatory precedent;
- TOTEX as a cost concept is consistent with regulatory best practice;
- TOTEX expenditures are subject to independent review by IPART as inputs into WaterNSW's revenue requirement; and
- It is reasonable to expect direct TOTEX to be correlated to the cost drivers associated with indirect/shared costs.

The TOTEX allocator will change over the course of the regulatory period, because the quantum of the costs driver on which the allocator is based changes. The information from which the percentage TOTEX allocators will be calculated will be sourced from WaterNSW Microsoft Dynamics 365 financial management system.

Net overhead costs

WaterNSW's net overhead costs are fully allocated to Core, Non-core and Other projects based upon percentage of TOTEX. The following figure provides a representation of our allocation process.

Net overheads are calculated by deducting those costs which can be directly allocated to regulated service streams, costs for non-core projects, costs for Warrangamba Dam Raising and other special projects and those costs which are capitalised from Total Gross Overhead.

Net overhead is allocated across all the operations projects covering our core regulatory activities based on the project's share of TOTEX. The allocation process is documented in Figure 2 and Table 4 below.

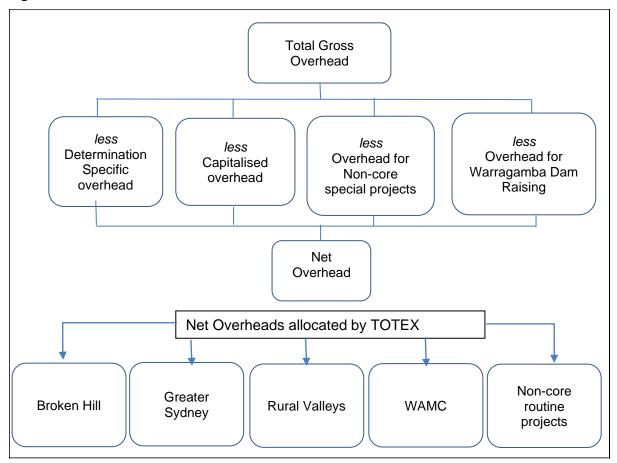


Figure 2 – Net overhead allocation

Table 4 – Overhead allocation components

Procedural component	Definition
Gross overhead	Gross overhead is comprised of cost that is not directly attributed (coded) to a project or activity. This Gross Overhead is comprised of operational overhead and corporate service overhead.
	Operational overhead are costs not directly attributable to specific projects or activities but have a relationship with the operation and delivery of service streams.
Determination specific overhead	Gross overhead is analysed and those costs that can be specifically attributable to one of the pricing determinations are attributed directly to

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Operational	Capitalised overhead from each operational business unit is charged to		
overhead	CAPEX projects managed and worked within each business unit based on		
allocation	proportional total value of capex projects managed by that Business Unit.		
	(see section 4.5).		
Overhead for Non-	These projects attract up to 10% of project direct opex as overhead, on		
core special	the basis that they are incremental to current capacity. Examples of these		
projects	projects are:		
	ad-hoc analyses and studies funded by DPI, e.g. Lachlan Valley		
	water security option investigation, preliminary engineering		
	investigation for Hunter Valley; and		
	National Water Infrastructure Development Fund (NWIDF), e.g Mole River		
	Valley and Dungowan Dam feasibility study.		
Overhead for			
	The remaining balance of overheads, after capitalisation and non-core		
routine Core and	special allocation, is applied against Core and Non-core projects based		
non-core projects	upon the TOTEX methodology: Completed alongside WaterNSW Core		
	(regulated) activities. Examples of non-core routine projects:		
	MDBA Constructing Authority;		
	Border Rivers Commission;		
	Mining rectification; and		
	Third party hydropower		
Overhead for	These projects attract up to 10% of project direct opex as overhead, on		
Warragamba Dam	the basis that they are incremental to current capacity. Examples of these		
Raising	projects are:		
	Warragamba Dam Raising;		

4.5 Capital Related costs

Under IPART's building block approach to determining total allowed costs and setting prices, capital costs comprise a return on assets and a return of assets (regulatory depreciation), plus return on working capital and a tax depreciation allowance.

Allocating the Regulated Asset Base

WaterNSW maintains separate regulatory asset bases (RABs) for each of its regulated services. The opening asset values for these RABs were set by IPART in its initial determinations for each service.

The RABs for each service are rolled forward over the course of the regulatory period to reflect direct and indirect / shared capital expenditure in accordance with IPART's standard approach as set out in each respective determination.

Allocating direct capital expenditure

Capital expenditure that is directly attributable to a service is allocated to that service consistent with the allocation principles and the approach adopted for opex.

Allocating shared corporate capital expenditure

Corporate capital projects are allocated between regulated business segments by the proportional value of salary costings.

- The adoption of salary costing (e.g. as a proxy for FTEs) as a basis for allocation reflects the close the close correlation between the expenditures for the majority of corporate capital projects and the number of FTEs associated with each project. It should be noted that Broken Hill does not share in these costs.
- Corporate capital projects support the ongoing operation of the business as a
 whole, and include costs such as ICT renewals, ICT telecommunications, ICT
 Analytics, ICT automation, ICT corporate systems, office refits and refurbishments
 and procurement.

4.6 Schedule of shared cost allocations

The following Table 5 provides a schedule of WaterNSW's shared cost allocations.

Table 5 – Schedule of shard cost allocations

Cost item	Description	Cost relationship and allocator	Costs allocated to
Corporate Capex projects	Corporate capital projects including ICT renewals, ICT telecommunications, ICT Analytics, ICT automation, ICT corporate systems, office refits and refurbishments and motor	Direct – Total Salary and Wages	Greater Sydney servicesRural Valleys servicesWAMC

vehicle procurement, among others.	

Appendix - Definitions

Overhead cost: cost that is not directly attributed (coded) to a project or customer. For example, corporate business unit overhead.

Operational Business Unit: System Operations, Water and Catchment Protection, Assets, Water Solutions and Market Strategy.

Customer Business Unit: Customer and Community.

Corporate Business Unit: Chief Executive, Corporate Strategy and Water Reform, Safety, Legal Governance and Risk, Finance and Commercial Services, People and Culture, Business Systems and Information

Non-core routine project (attracts a full share of overhead): Completed alongside WaterNSW Core (regulated) activities. Examples of non-core routine projects:

- MDBA Constructing Authority;
- Border Rivers Commission;
- · Mining rectification; and
- Third party hydropower

Non-core special project (attract a percentage of 10% of project direct costs as overhead): Incremental to current capacity, for example:

- Warragamba Dam Raising;
- ad-hoc analyses and studies funded by DPI, e.g. Lachlan Valley water security option investigation, preliminary engineering investigation for Hunter Valley;
- Government funded projects such as National Water Infrastructure Development Fund (NWIDF), e.g Mole River Valley and Dungowan Dam feasibility study; and

Determination Specific Overhead: Non identifiable activity costs but they can be identified to a specific pricing determination.