Proposed Rouse Hill Stormwater Development Servicing Plan

For public exhibition

1 December 2025 to 27 February 2026

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The term ‘2018 Determination’ refers to the Independent Pricing and Regulatory Tribunal (IPART) 2018 Determination for connecting or upgrading a water, sewerage, or drainage connection. This determination sets out the price calculation methodology and procedural requirements for this Development Servicing Plan (DSP).

The 2018 Determination requires that we show all dollars as at 1 July 2025 (that is, 2025–26 financial year dollars, or real dollars of this year). This is the financial year we expect the finalised DSP to be registered with IPART. All past and future costs and revenues are also shown as at 1 July 2025. By reporting all amounts in real dollars of the expected registration year, it allows for easier comparison between the amounts Sydney Water has spent (capital and operating costs) or received (customer revenue) across different years because the effect of inflation has been removed. This convention is identified throughout the document using $2025–26.

1 Executive Summary

This proposed Development Servicing Plan (DSP) sets the contribution payable when new developments connect to Sydney Water's stormwater services in the Rouse Hill stormwater catchment area. This contribution reflects the cost of providing new services and ensures this cost is paid by the development that benefits directly from the newly connected service rather than being paid for by other customers.

The infrastructure contribution price for connecting a new development uses the calculation method set by the Independent Pricing and Regulatory Tribunal's (IPART) in their 2018 Determination[1]. This method shares the costs equally across both existing and future development within the Rouse Hill stormwater catchment area. The price covers the cost of the land where the catchment system is built, along with various stormwater infrastructure such as detention basins, wetlands, large drainage pipes and channels, devices that improve water quality (like pollutant traps and trash racks) and the restoration of creeks and wetlands.

In 2023, we published DSPs for water and wastewater, but not for stormwater in the Rouse Hill area. At the time, costs for stormwater services were being recovered through the Rouse Hill Land Charge set by IPART, which was paid directly by newly connecting customers. It would not have been appropriate to introduce a separate developer contribution while that charge was in place.

As part of its final determination of Sydney Water's 2025–30 prices, IPART ended the Rouse Hill Land Charge on 1 October 2025. This means new development in the catchment will no longer be funded by customers through land charges. Instead, developers will again need to pay their share of the infrastructure costs from that date[2]. The updated DSP prices reflect the estimated cost of connecting development to the stormwater system, to manage flooding and protect downstream waterways including the Hawkesbury Nepean River, from pollution and damage caused by stormwater runoff.

The updated contribution price for Rouse Hill Stormwater catchment area is **$20,821.04** ($2025–26) per Equivalent Tenement (ET), which is equivalent to **~$198,373** per net developable hectare. The infrastructure contribution price will be adjusted each financial year based on changes to the March-on-March Consumer Price Index (CPI) all groups weighted average of eight capital cities. Table 1-1 sets out the proposed maximum prices payable by new developments for stormwater services in the Rouse Hill Stormwater catchment area from when the stormwater scheme DSP is registered with IPART. These prices will increase each year with CPI and remain in effect until the DSP is reviewed and updated no later than 2030.

[1] IPART 2018 *Maximum prices for connecting, or upgrading a connection, to a water supply, sewerage, or drainage system - Sydney Water, Hunter Water and Central Coast Council - Final Determination, October 2018.*

[2] Developers had also paid infrastructure contributions under previous Rouse Hill stormwater DSPs until 2008 when the charges were set to zero.

Table 1-1 Proposed Infrastructure Contribution Prices for this DSP ($2025–26)

Proposed maximum price calculated under the 2018 Determination ($/ET)	**$20,821.04**
Proposed maximum price calculated under the 2018 Determination ($/developable hectare)	~$198,373.13

Note: the price is also adjusted each financial year based on changes in the Consumer Price Index (CPI)

Table 1-2 Indicative Infrastructure Contribution for various development types ($2025–26)

Dwelling Type	**Indicative developable area (examples)**	**Proposed maximum price for this example**
Single Dwelling - large lot	500 m^2	~$9,919
Single dwelling - small lot	300m^2	~$5,951
Multi-Dwelling (Unit)	37 m^2	~$734

Note: The indicative developed area size per multi-dwelling unit (37 m^2) is based on planning assumptions for medium to high-density residential areas within the Rouse Hill stormwater catchment, where 270 dwellings per hectare are expected. This equates to one unit per 37 m^2 of land (10,000 m^2 ÷ 270 dwellings).

2 Introduction

2.1 Infrastructure contributions and Development Servicing Plans

This DSP provides details of the infrastructure, costs and revenues associated with the stormwater scheme and the existing and proposed development within the Rouse Hill Stormwater Drainage area. The contributions that new developments must pay are calculated using IPART's 2018 Determination methodology, based on the estimated costs of providing stormwater infrastructure and the expected net operating costs from those developments.

DSPs must include all capital and operating costs as well as expected future revenue associated with the scheme. Costs include land acquisition, infrastructure design and delivery, operations and maintenance and land tax. Revenue includes ongoing service charges payable by the newly connected customers in the stormwater catchment and therefore benefit from the stormwater service.

2.2 Who pays the infrastructure contribution?

As part of the development approval process, the proponent must apply for and obtain a Section 73 Compliance Certificate from Sydney Water. This certificate confirms that suitable arrangements have been made to provide water-related services to the development. To identify and confirm the required arrangements, the proponent must submit a Section 73 Compliance Certificate application to Sydney Water.

When Sydney Water receives a Section 73 Compliance Certificate application, it assesses how the proposed development will affect and rely on our systems. Based on this assessment, we will issue a Notice of Requirements (NoR) under Section 74 of the *Sydney Water Act*. This notice outlines what the development must do (e.g. by building specific water infrastructure and/or paying required contributions). Infrastructure contributions are payable by all developments that require a Section 73 Certificate and must be paid by the proponent of the development before the certificate can be issued.

When a subdivision is proposed, we will assess its impact on the system as part of the Section 73 application process. This assessment helps determine the infrastructure contribution that applies to the subdivision. The amount payable will depend on the specific characteristics of the subdivision, including the potential impact of future development allowed on the site. In some cases, we may adjust the amount payable to reflect only the net increase in demand, which may include recognition of past payments. As much of the Rouse Hill DSP area has already developed, we anticipate a higher-than-usual number of developments will receive a credit for land that is being redeveloped rather than land which is being developed for the first time. We describe this credit mechanism in *Section* 2.3 - *How do I apply the charge to my development?*

From the date of registration of this plan, all Rouse Hill integrated stormwater infrastructure contributions become payable within 30 days from the day the infrastructure contribution invoice is raised.

2.3 How do I apply the charge to my development?

The infrastructure contribution price is the amount that must be paid by one equivalent tenement (ET). IPART's 2018 Determination defines one ET as being equal to the annual total demand of an average detached, single residential dwelling[3]. For a stormwater scheme, we propose that demand on the system is proportional to developed land area regardless of property type. Therefore, all new connections would pay a contribution that is proportional to the newly developed area of their property.

The total infrastructure contribution payable by any development will equal the base price in the DSP area multiplied by the number of ETs for that development. In this catchment area, for stormwater, we propose that one ET should equal ~0.105 hectare of net developable area[4]. If Sydney Water receives a Section 73 application for a development and assesses that it is located on one hectare of developable land, the development would be for ~9.528 ETs (9.528 times the size and demand for a single ET of 0.105 hectare). The proposed base price in the DSP area is $20,821.04 per ET, so in this example, the development would be required to pay $198,373 ($20,821.04 per ET x 9.528 ETs) [5].

Dwellings constructed in the Rouse Hill Stormwater catchment are located on a range of property areas, and the charge per dwelling would generally be less than the charge for one ET. This is because the charge is always calculated using the same $/m^2 rate so would always be proportional to the property area. For example, if a new dwelling is being built on 500m^2 of land, the developer will be required to make an infrastructure contribution of ~$9,919 (@~$19.84/m^2 x 500).

[3] IPART did not specify a value for 'average demand' in their 2020 retail price determination, so we must describe what value we will use when calculating the contribution price for a DSP area. Our method and approach to defining the average demand of one ET is set out in Appendix 5.2 of this report.

[4] Although this area of land is larger than average for single dwellings in this DSP area, this ET to hectare conversion rate is being proposed because it matches the rate adopted in the Mamre Road integrated stormwater DSP. As such, it allows for easy comparison of the cost to develop in different catchments. We also note that as all charges will be proportional to net developable area, the conversion rate only exists to allow compliance with IPART's determination which specifies that prices must be calculated and reported 'per ET' not per m^2.

[5] All ET to hectare or m^2 conversion rates in this document have been rounded to three decimal places, however, all IC prices payable would be calculated using the unrounded conversion rates shown in the DSP calculation spreadsheet, once it has been finalised and registered with IPART. The draft DSP calculation spreadsheet is available during the exhibition period on Sydney Water's Rouse Hill stormwater DSP website.

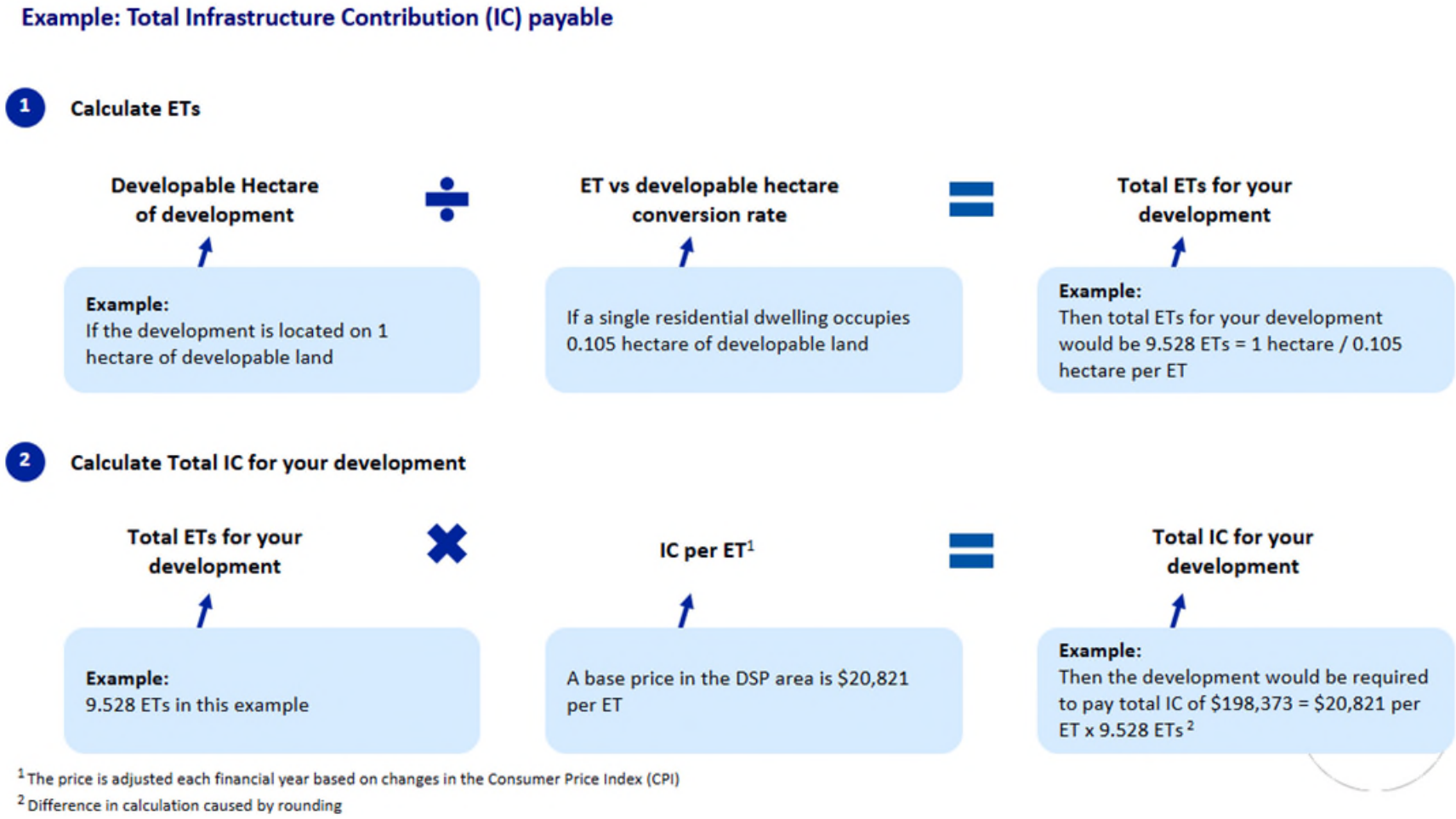


Figure 2-1 Total Infrastructure Contribution (IC) calculation example

Sydney Water will determine the number of ETs for a development using information provided during the Section 73 application process.

2.3.1 Chargeable and non-chargeable areas

Stormwater infrastructure contributions are levied in proportion to the chargeable area of the property being developed. We refer to the chargeable area of a property as its Net Developable Area (NDA). In the Rouse Hill stormwater catchment, we use a similar definition of total developable and chargeable areas as the recently registered Mamre Road DSP. For this DSP however, some land uses which are excluded from NDA in the Mamre Road and Aerotropolis precincts have already been developed in Rouse Hill and have already paid a contribution (for example, properties used for community service and/or church properties). Only land we classify as having NDA in each DSP is subject to infrastructure contributions. As such we will continue to include the land-uses where properties have already made contributions as developable area for this DSP. Developable and chargeable land in this DSP includes the following land use types:

- Residential
    - General, Low, Medium and High-density Residential Land
    - Mixed Use
    - Environmental Living
- Non-Residential
    - General Industrial
    - Private Recreation
    - Educational Establishment and Place of Worship
    - Information and Education Facilities
    - Special Activities (with some exclusions noted below)
    - Business Park and Enterprise
    - Environmental Living
    - Local Centre
    - Neighbourhood Centre
    - Productivity Support

The definition of developable land does not include the following non-chargeable areas:

- Infrastructure: Drainage systems, stormwater management, trunk drainage, electricity substations, water reservoirs and supply systems, public transport and railway corridors
- Special Activities: Cemetery and Crematorium
- Environmental Areas: Natural waterways, environmental conservation zones
- Public Use: Public recreation areas, roads

Although the total catchment area is 4,469 hectares, only 2,734 hectares are considered developable and chargeable for infrastructure contribution calculation purposes. This includes:

- 2,344 hectares of already developed land (existing properties), and
- 390 hectares of land available to be developed

The total existing and incremental infrastructure costs are distributed across these 2,734 hectares.

2.3.2 Redevelopment credit mechanism

Like contributions for water and wastewater, Sydney Water may apply a credit to recognise existing land usage. If the credit exceeds the charge, then a zero contribution applies, that is, the minimum contribution will always be zero.

We propose that the credit should be linked to the contribution rate which applied immediately preceding 1 October 2025. We would do this by applying the same rate of redevelopment credit for all previously developed properties regardless of when they had previously developed. That is, for properties who previously developed:

1. **when the Rouse Hill Land Charges applied** (1 July 2012 – 30 September 2025) the credit would equal the total Rouse Hill Land Charges paid by the owner (or previous owners) of the property which is being redeveloped. The credit applied to these properties would range from one quarterly Rouse Hill Land Charge (if the property was only recently developed) to the full Rouse Hill Land Charge of twenty quarterly payments, for properties for which all twenty payments have been made.
2. **before the Rouse Hill Land Charges applied** (before 1 July 2012), the credit would equal the total Rouse Hill Land Charges which **would have** become payable by the owner (or previous owners) of the property being redeveloped **if** that property had previously been developed when the Rouse Hill Land Charges applied (1 July 2012 – 30 September 2025). The credit to be applied to these properties would always equal the full Rouse

Hill Land Charge of twenty quarterly payments to recognise these properties would have fully complied with contribution requirements at the time they developed.

We estimate there are around 30,000 properties in the Rouse Hill DSP area which could receive the above credit, if they were redeveloped in the future. We will update our Infrastructure Contributions Policy on our website to describe the stormwater DSP credit mechanism for Rouse Hill stormwater contributions once this is finalised and the DSP is registered with IPART.

Charging based on net developable area means each development pays a contribution that reflects its impact on the overall stormwater system. In this precinct, one ET is assumed to represent ~0.105 hectares of net developable area (NDA). Whether the contribution is calculated using ETs or net developable hectares, the total amount payable remains directly proportional to the size of the development's NDA.

The contribution price set out in this DSP will apply to all developments requiring a new stormwater connection, where a Section 73 Compliance Certificate is required.

Development may also be required to pay a drinking water and wastewater infrastructure contribution. The method to calculate drinking water and wastewater infrastructure contributions is similar but not identical to how stormwater contributions are calculated. For more details, please see the *How we apply IPART's pricing method* document on the Sydney Water website.

2.4 Land to which the plan applies

This DSP outlines Sydney Water's policy regarding the application of Section 74 of the Sydney Water Act (1994) in relation to the provision of stormwater infrastructure to service the impact of development within the Cattai Creek, via Caddies Creek, Smalls Creek, Second Ponds Creek, Strangers Creek and Elizabeth Macarthur Creek stormwater catchments (collectively known as the Rouse Hill Drainage Area).

Stormwater related development requirements within the Kellyville Bella Vista Transport Orientated Development Precincts (TOD Precincts) have recently been updated as part of the rezoning process. Sydney Water is currently investigating what additional stormwater infrastructure might be required to support development in these areas. Any additional infrastructure which is only required by development within the TOD Precincts would be subject to a future TOD-specific DSP.

2.5 Design parameters and assets

The drainage networks in Rouse Hill are managed in a collaborative partnership between Sydney Water and the Blacktown City and the Hills Shire Councils. Sydney Water is responsible for managing the Trunk Drainage Lands (TDL), which cover about 360 hectares. This includes riparian corridors and areas along the five main creek lines (and larger tributaries) that are subject to flooding in a 1 per cent annual exceedance probability (AEP) event:

- Caddies Creek
- Strangers Creek
- Elizabeth Macarthur Creek
- Smalls Creek
- Second Ponds Creek.

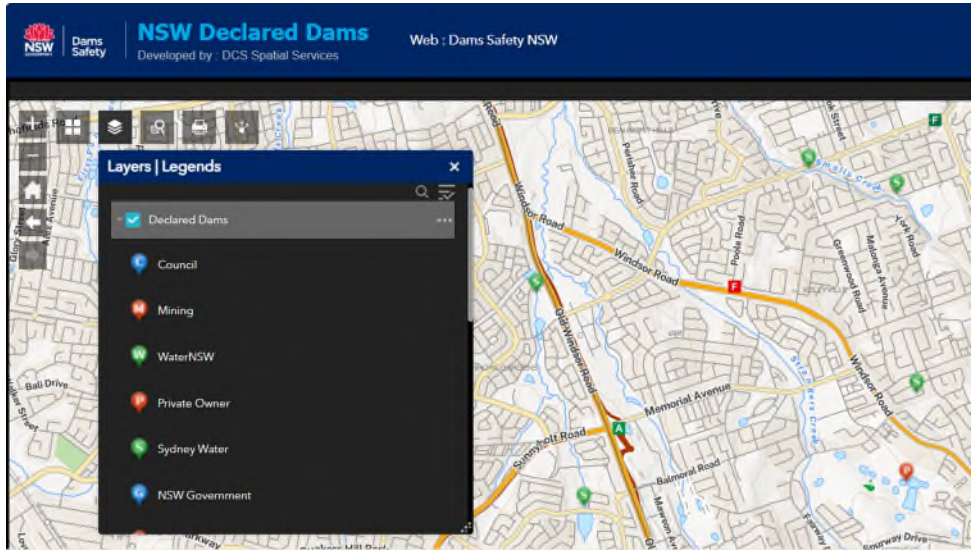


Figure 2-2 NSW Declared Dams Map

Sydney Water's drainage services in the Rouse Hill Development Area were the first large-scale urban development project designed to balance development needs with environmental protection, especially for the Hawkesbury-Nepean River. These services are part of an integrated water management approach that includes water recycling, environmentally sensitive soft engineering solutions, state-of-the-art wastewater treatment and the use of artificial wetlands to manage stormwater sustainably[6].

Five of the stormwater basins include structures owned by Sydney Water which are Declared Dams under the *Dams Safety Act 2015* (shown to the left). These structures are subject to a rigorous programme of surveillance to ensure the continuing safety of these dams. The remaining drainage assets within the catchment and outside Sydney Water's TDL are owned by the Blacktown City and the Hills Shire Councils (including many basins and most of the underground pit and pipe systems).

[6] Government Pricing Tribunal of New South Wales (now IPART) 1993, *Determination of Special Water, Sewerage and Drainage services for the Rouse Hill Development Area, Determination No 7, 8 December 1993*

The design requirements for commissioned assets (including basins, wetlands, channels, layout etc.) were defined in the design manual[7] and the strategy review report prepared for the Rouse Hill Infrastructure Consortium[8]. Designs were determined using a combination of the hydrologic, hydraulic, and water quality modelling tools available at the time, including AQUALM for water quality, and XP-RAFTS and HEC-RAS for hydrologic and hydraulic modelling.

These tools enabled the simulation of different levels of runoff volumes, flow rates, and pollutant loads, which subsequently determined the sizes and configuration of basins, gross pollutant traps (GPTs), and other stormwater assets. The criteria and performance targets used to design the drainage networks in Rouse Hill include:

- The peak rate of discharge for the 100 year average recurrent interval (ARI) critical duration design event, for the urbanised area, is not to exceed the equivalent value for the existing land uses at the discharge from each detention basin and wet/dry basin, nor at the discharge point in Caddies Creek, Smalls Creek North, Smalls Creek South, Second Ponds Creek and into Cattai Creek
- The peak rate of discharge for the 2-year and 20-year ARI critical duration design events, for the urbanised area, are not to vary by more than +/- 15% from the equivalent value for the existing land uses from each detention basin and wet/dry basin, as well as the discharge point in Caddies Creek, Smalls Creek North, Smalls Creek South, Second Ponds Creek and into Cattai Creek
- The annual average export of total phosphorus in stormwater runoff, from diffuse sources, is not to exceed set compliance level from the Rouse Hill drainage area when full development occurs, nor to exceed that for the existing land use where water discharge from a stormwater treatment measure
- The average annual export of suspended solids is not to exceed that for the existing land use where water discharges from a stormwater treatment measure, nor at the discharge point in Caddies Creek, Smalls Creek North, Smalls Creek South, Second Ponds Creek and into Cattai Creek
- The design must be consistent with all State Government policies and legislation and should, where possible, be consistent with state and local government policies and guidelines
- Culverts were designed so that they safely convey design recurrence interval flows nominated by the former Rouse Hill Infrastructure Consortium without significant downstream erosion or upstream flood impacts.

As required by IPART's pricing method, we have published and seek feedback on the spreadsheet that outlines the costs that have been included in the Rouse Hill stormwater infrastructure contribution:

[7] GHD '*Stormwater Trunk Drainage System Design Manual'* (1994)
[8] GHD '*Rouse Hill Stage 1 Area Trunk Drainage Strategy Review'* (1998)

- Land including stamp duty: the land acquisition cost and associated stamp duty for all trunk drainage land and easements.
- Planning: initial work establishing the stormwater scheme.
- Construction management: temporary site facilities, erosion and sediment control, pre- and post-construction survey and inspections (traffic management, construction signage, geotechnical supervision etc).
- Concept and detailed design costs.
- Trunk drainage: earth works, rock stabilisation as required and revegetation.
- Diversions and wetland inlets: headwalls, small weirs and pipes that divert water into the wetlands.
- GPTs and access: gross pollutant traps and maintenance access driveways/paths.
- Wetlands ponds and outlets: the bulk of wetland/pond construction including earthworks, vegetation, pipes, pits, rockwork etc.
- Disposal of excess spoil: allowance for removal of excess spoil (that can't be reused on site) offsite to landfill.
- Future incremental operating and maintenance costs: including:
    - Condition assessments (every 10 years)
    - Monitoring plans
    - GPT maintenance
    - Bush regeneration and weeding control
    - Land tax
    - Corporate overheads

2.6 Public Purpose

The Rouse Hill Stormwater System provides assets and services for the benefit of the public, mitigating the impact, and facilitating the benefits, of development to meet NSW Government requirements and community expectations. It was designed and built in accordance with the requirements set out in Section 2.5 Design parameters and assets.

By meeting these requirements, the stormwater scheme provides a range of benefits to the future community by allowing development to progress, delivering safe, flood resilient areas to increase urban amenity while protecting waterway health and the environment.

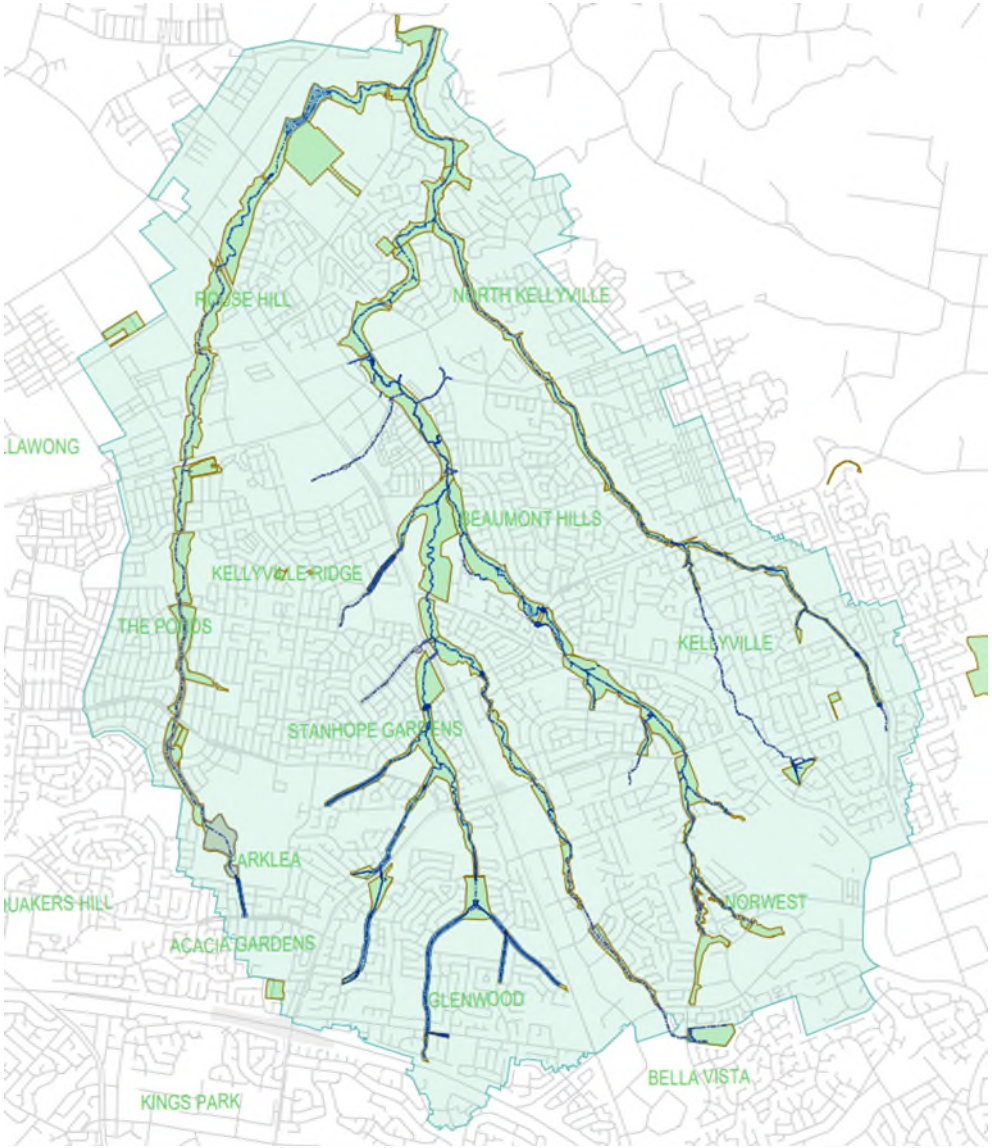


Figure 3-1 Rouse Hill Stormwater Development Servicing Plan Area

3 Rouse Hill Stormwater Development Servicing Plan area

3.1 Systems covered by this DSP

This DSP defines the stormwater system for which development pays a contribution. The scope of contributions is limited to the stormwater system within the Rouse Hill stormwater catchment boundary. The boundary definition ensures that all development contributing runoff to the shared stormwater system is included in the contribution area.

Figure 3-1 shows the boundary of the Rouse Hill stormwater catchment. It highlights the area where infrastructure charges apply and identifies the location of the stormwater infrastructure included in the system.

3.2 Past and future development in the DSP area

To equally distribute stormwater infrastructure costs across the Rouse Hill catchment, we've identified which areas are already developed and which are zoned for future development. Future development forecasts are based on the DPHI growth forecast, Sydney Water growth intelligence data, and consultation with developers.

IPART's 2018 Determination requires that we distribute costs across ETs which connect to the system. Each development (property) represents a certain number of ETs (or a fraction of one ET). IPART's approach is that each development should pay a contribution that matches the level of demand it places on the stormwater system. In practice, this means the greater the impact of a development, the more Equivalent Tenements (ETs) it is assigned and the higher its total infrastructure charge.

For this DSP area we have defined one ET as ~0.105 hectares of net developable area. Existing and future ETs connected in each year are proportional to the development which has occurred in terms of net area developed in that year. For both residential and non-residential development, incremental ETs are calculated as the land that is expected to be developed in the future (projected) and excludes land that is already developed (existing), according to current zoning. We have used two categories of dwelling density, one to forecast new single dwellings (low density) and one to forecast multi-unit residential dwellings (medium/high density). For non-residential development, future ETs are forecast to use the total area which remains available for commercial and industrial use which excludes mixed-use zones which are already captured in the residential forecast.

The infrastructure contributions defined in this DSP are only payable by future development.

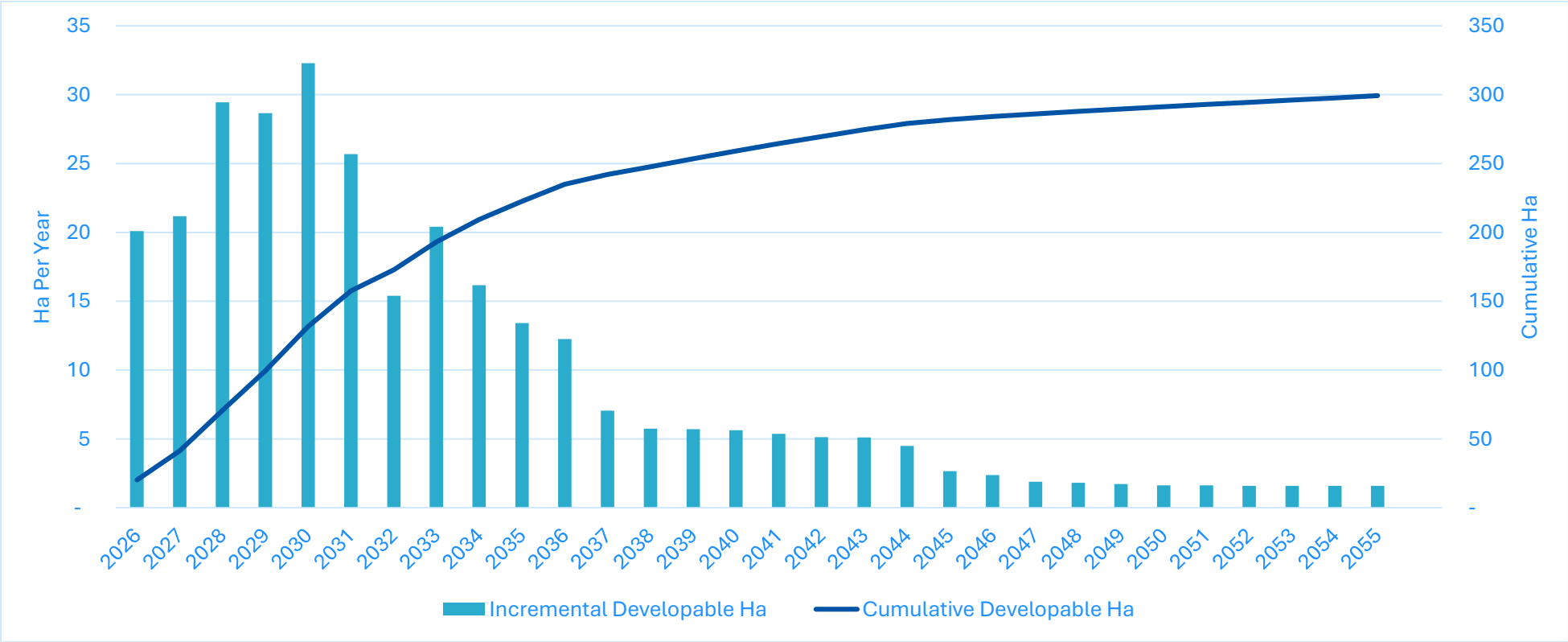


Figure 3-2 Forecast future development (developable hectares) in the Rouse Hill Stormwater DSP Area

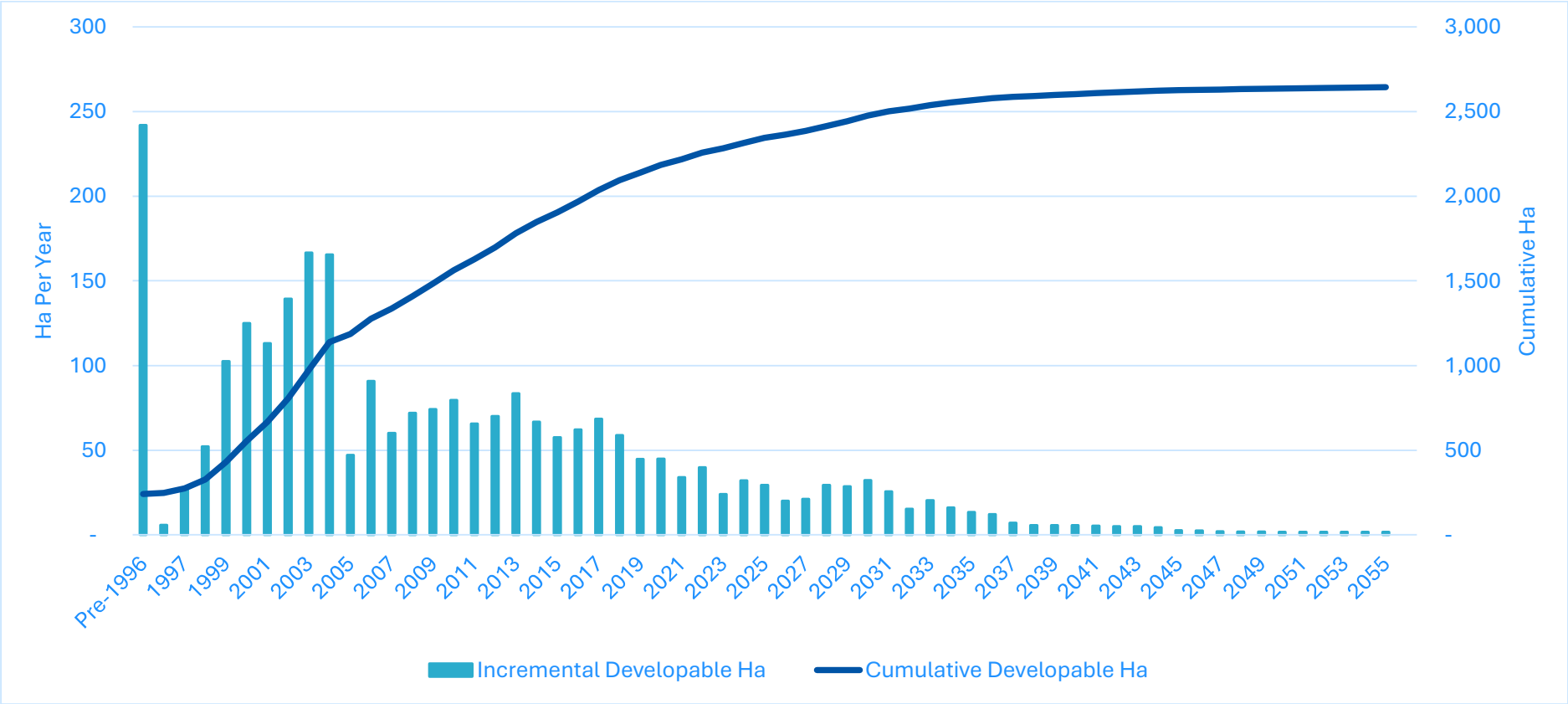


Figure 3-3 Forecast existing and future development (in developable hectares) in the Rouse Hill Stormwater DSP Area

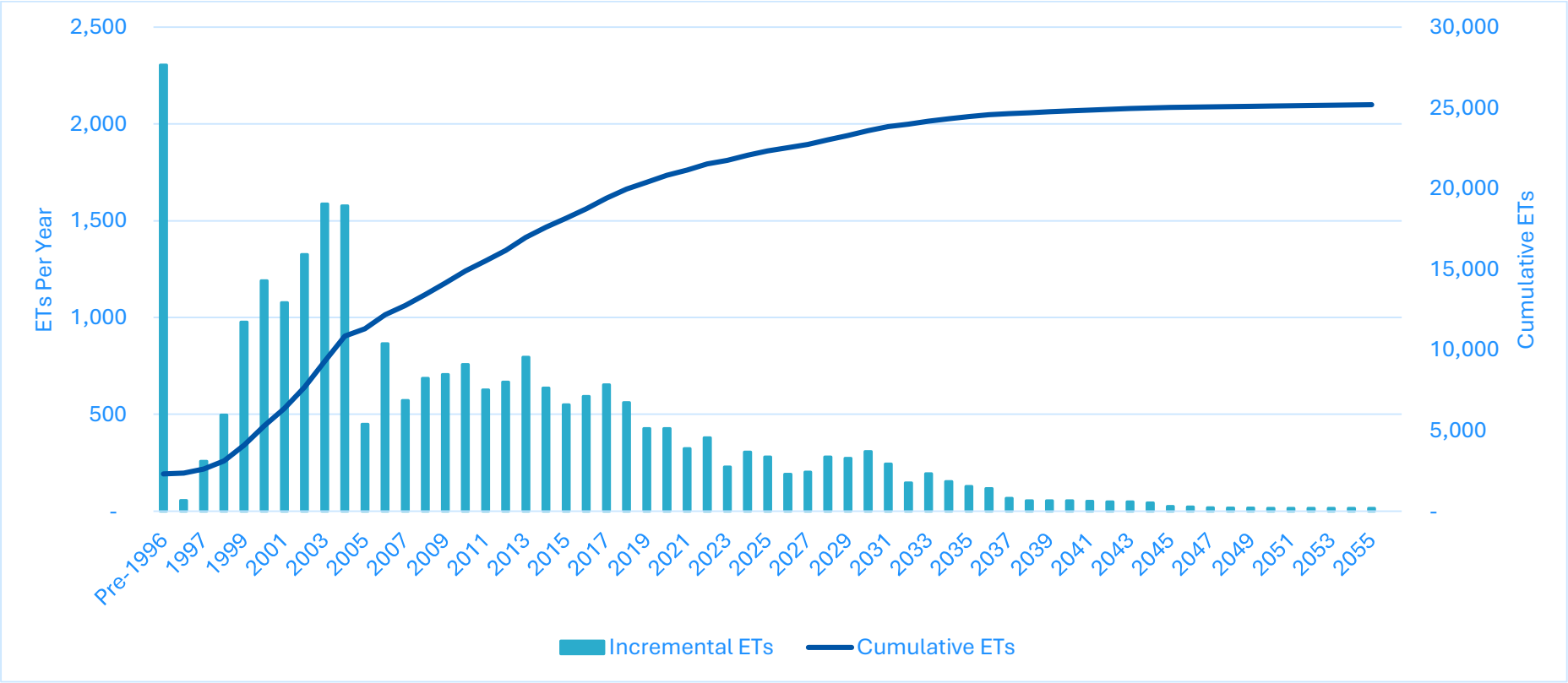


Figure 3-4 Existing and forecast future development (in Equivalent Tenements) in the Rouse Hill Stormwater DSP Area

Table 3-1 Forecast total development in the Rouse Hill Stormwater DSP Area

Financial year:	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33	2033–34	2034–35	2035–36	2036–55	Total
New Development - NDA (Hectares)	20	21	29	29	32	26	15	20	16	13	12	64	**299**
New development (ETs)	191	202	280	273	308	245	147	194	154	128	117	613	**2851**

3.3 Past and future assets providing services to the DSP area

The total cost of stormwater infrastructure assets needed to support existing and future development within the Rouse Hill stormwater catchment includes both past investments and planned future works. As shown in Figure 3-5, asset values are presented in the year of commissioning, consistent with IPART's pricing methodology. Non-cash contributions, also known as Assets Free of Charge (AFOC), are not included in this figure.

Assets expected to be delivered in the future are consistent with Sydney Water's SCI forecast[9] (which is a ten-year forecast). For asset renewals, we have adopted a 30-year investment horizon to match the assumptions used in the recently registered Mamre Road integrated stormwater DSP. The figure below includes asset renewals, reflecting continued investment beyond the initial capital works, particularly after 2030. Asset renewal costs would also continue beyond 2055 however we have limited these to match the 30-year limit on connected growth and net operating costs.

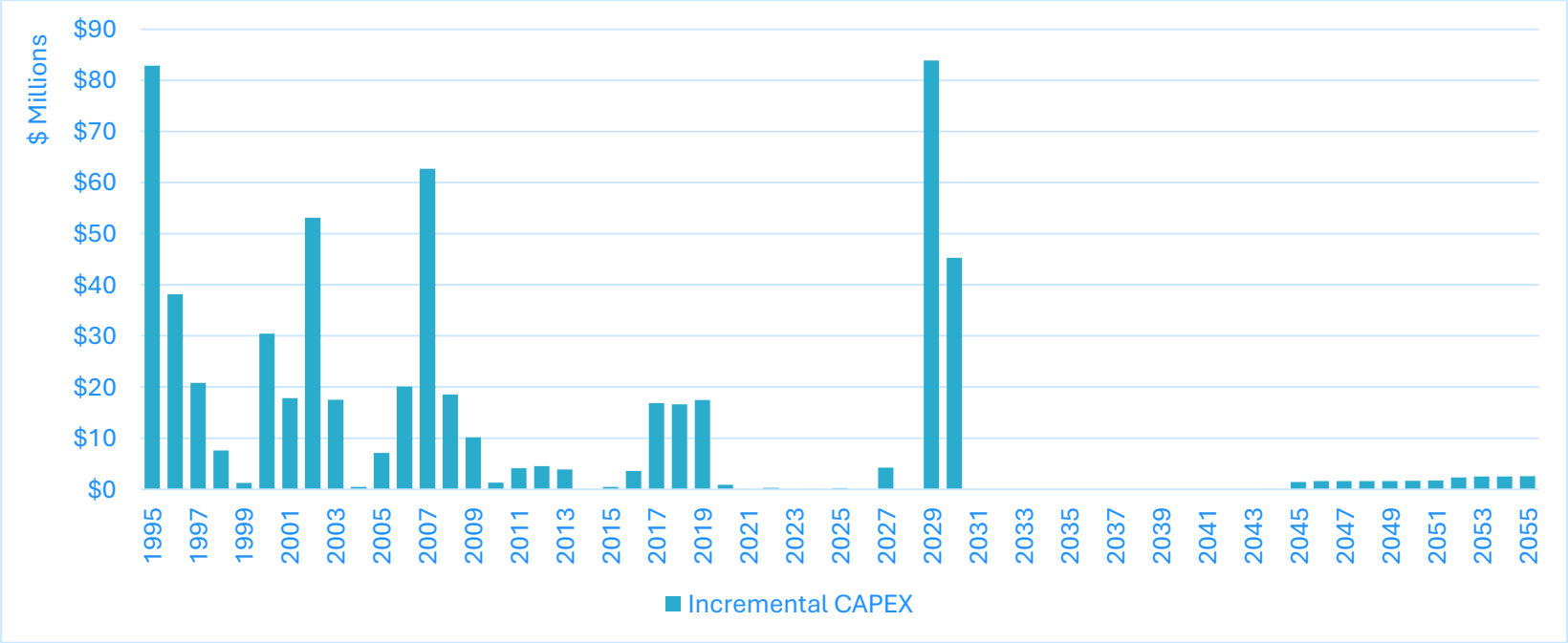


Figure 3-5 Past and future Assets ($2025–26) in the Rouse Hill Stormwater DSP Area

[9] Sydney Water Statement of Corporate Intent 2025–26, containing forecasts of capital investment plans, operational expenditure, strategic priorities, performance

4 Infrastructure contribution calculation

The main elements of IPART's pricing method are shown in Figure 4-1. The rest of this section presents the results of applying this method.

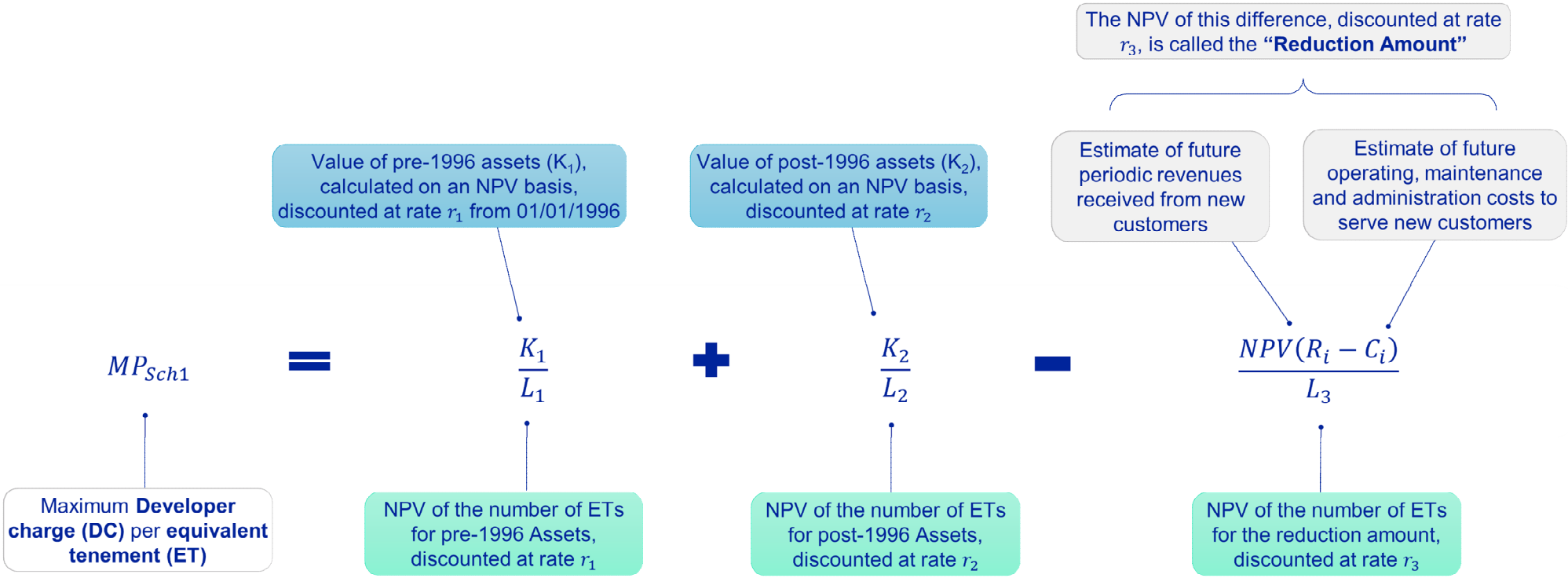


Figure 4-1 IPART's infrastructure contribution pricing method

Note: for this DSP, one ET = ~0.105 hectares, so, each hectare will be charged as ~9.528 ETs. There is no stormwater headworks associated with this DSP, so all capital and operating costs relate to infrastructure within the DSP boundary.

4.1 Key inputs for this DSP

The infrastructure contribution price is based on a set of inputs and assumptions, including retail prices and escalation rates. Detailed information about these assumptions and the calculation method is provided in the methodology section (Appendix 5.2) of this document.

Table 4-1 Inputs to the infrastructure contribution calculation model

Base Year	2025–26
Real pre-tax discount rate for pre-1996 values (K_1, L_1)	3.0%
Real pre-tax discount rate for post-1996 values (K_2, L_2, L_3)	4.1%
Relationship between hectares of developable land and equivalent tenements (ETs)	9.528 ETs per hectare

4.2 Infrastructure contribution price elements

Table 4-2 Charge for pre-1996 assets

(A) Present value of pre-1996 assets (K_1)	$205,414,086
(B) Present value of equivalent tenements (L_1)	36,892
(C) Capital charge for pre-1996 assets (A) / (B)	$5,568 / ET

Table 4-3 Charge for future assets

	Commissioned	Un-commissioned
(A) Present value of post-1996 assets (K_2)	$784,722,912	$120,957,234
(B) Present value of equivalent tenements (L_2)	44,674	44,674
Capital charge for assets (A) / (B)	$17,566 / ET	$2,708 / ET

Table 4-4 Net operating result

(A) Present value of revenue (R)	$18,845,957
(B) Present value of operating costs (C)	$7,787,410
(C) Present value of ETs (L_3)	2,202
Net operating result (A) + (B) / (C)	$5,021 / ET

4.3 Total infrastructure contribution price

The following table shows the components of the infrastructure contribution calculation. It should be noted that the price / ET is calculated on the assumption that an ET is equal to ~0.105 hectares, consistent with the Mamre Road integrated stormwater DSP.

Table 4-5 Components of the infrastructure contribution price, $ per ET ($2025–26)

(A) Stormwater headworks	(B) Pre-1996 assets	(C) Post 1996 assets	(D) Post 1996 Uncommissioned Assets	(E) Net operating result	(A) + (B) + (C) + (D) – (E) Infrastructure contribution
$0	$5,568 / ET	$17,566 / ET	$2,708 / ET	$5,021 / ET	$20,821.04 / ET

The above net operating result is positive due to forecast revenue being higher than the operating costs. This means the result decreases rather than increases the contribution. See section 5.2.16 for more detail.
Note: There is no stormwater headworks associated with this DSP, so we show these as $0 for consistency with IPART's spreadsheet calculation template.

5 Appendices

5.1 Appendix A – Minimum content of documentation for public exhibition

IPART information requirement	Reference
A summary of the contents of the DSP	Contents page
A statement specifying the System (or Systems) to which the DSP relates	Section 3.1
A clear and accurate description of the DSP Area to which the DSP applies, including:	
(1) its size;	Section 3.1
(2) the basis for defining its boundaries; and	See also the DSP methodology Appendix 5.2
(3) reference to other DSPs where there is an overlap or co-usage of Assets	
Demographic and land use planning information including:	
(1) the current residential population in the DSP Area;	Section 3.2
(2) the estimated Equivalent Tenements in the DSP Area as at 1 January 1996;	Section 3.2
(3) the projected population over a period of 30 financial years starting from the financial year in which the DSP was registered with IPART; and	Section 3.2
(4) the projected Equivalent Tenements in the DSP Area for each financial year over a period of 30 financial years starting from the financial year in which the DSP was [is expected to be] registered with IPART	Infrastructure contribution calculation spreadsheets and Figure 3.4
Timing of works in the DSP Area including:	
(1) completed capital works; and	Infrastructure contribution calculation spreadsheets
(2) proposed capital works	
The standards of service to be provided to customers in the DSP Area and design parameters of Assets	DSP methodology Appendix 5.2

IPART information requirement	Reference
The calculated maximum price under clause 1 of Schedule 1 (*MPSch1*), and the information used to calculate that price, including: (1) the future periodic revenues expected to be received from new customers in the DSP Area each financial year; (2) the charges used for the calculation of those revenues; (3) average water usage figures used for the calculation of those revenues; (4) the future expected annual operating, maintenance and administration costs of providing services to new customers in the DSP area in each financial year; and (5) indexation principles and parameters used for that calculation.	Section 4 Infrastructure contribution calculation spreadsheets See also the DSP methodology Appendix 5.2
A description, or reference to a background document containing the description, of Pre-1996 Assets and Post-1996 Assets in the DSP Area including: (1) the date (or forecast date) of the commissioning of each Asset; (2) the size/length of each Asset; (3) the actual efficient cost of each Asset (where applicable); (4) the unit cost of each Asset (if applicable); (5) the MEERA valuation of each Asset (if applicable); (6) the total capacity of each Asset expressed in Equivalent Tenements (if applicable); and (7) the details of the number of Equivalent Tenements served by each Asset in each DSP Area, where that Asset serves more than one DSP Area.	Infrastructure contribution calculation spreadsheets

How can I provide feedback?

Visit www.sydneywater.com.au/rousehillstormwater to view the documents from 1 December 2025 to 27 February 2026. The information available includes the Rouse Hill Stormwater DSP, the supporting Excel spreadsheet calculation model and a FAQ document. You can make a submission during the exhibition period by emailing infrastructurecontributions@sydneywater.com.au.

Written feedback received during the exhibition period will be addressed after the exhibition closes. Most responses will be summarised in a "What We Heard" report, which will cover all key themes and comments. If a specific issue can't be adequately addressed in the summary report, we may also provide a direct response to the individual who raised it.

While we will consider comments made on social media about the draft DSP as part of the registration process, we will only respond to individual comments in exceptional cases.

IPART reviews and registers each proposed DSP we submit. Registered DSPs remain in force until reviewed and replaced (at maximum five-year intervals).

If you have any further questions, please email infrastructure.contributions@sydneywater.com.au

5.2 Appendix B – How we have applied IPART's methodology

The contribution price payable by each development is worked out using a method set by IPART in their 2018 Determination. This appendix provides information on how we apply IPART's Determination.

5.2.1 Our application of IPART's pricing method

IPART's methodology for infrastructure contributions is designed to work in tandem with the setting of regulated retail prices. Costs not recovered through infrastructure contributions will be recovered from regulated retail prices.

The IPART methodology generates a price payable by development inside Development Servicing Plan (DSP) areas. The price in each DSP area recovers the cost of assets needed to service development, with an adjustment for the revenue to be received from new retail customers.

If servicing costs in an area are very low, it is possible that no contribution will be payable. In these low-cost areas, the normal ongoing revenue from each new customer is enough to cover the cost of providing them with services.

In areas with higher costs, the developer must contribute because revenue from new customers is not sufficient to fully recover costs. If we did not collect a contribution from the new connections enabled by developers, bills for all other customers would have to increase, placing additional pressure on household bills. The zero-charge infrastructure contributions policy that was implemented in 2008 by the then NSW Government has reduced the affordability of our services for all customers, adding up to $200 a year to customer bills across Sydney Water's entire customer base[10].

IPART does not specify the number or size of DSP areas, instead leaving the design of DSPs to be worked through with developers and customers. We have been engaging with stakeholders to understand their preferences, while considering the objectives of IPART's method and the principles for infrastructure contributions identified by the NSW Productivity Commission[11]:

- Simple
- Consistent
- Transparent
- Efficient
- Certain.

[10] Water, wastewater and stormwater infrastructure contributions in metropolitan areas were set to zero by the NSW Government in December 2008. This policy was rescinded from 1 January 2022.

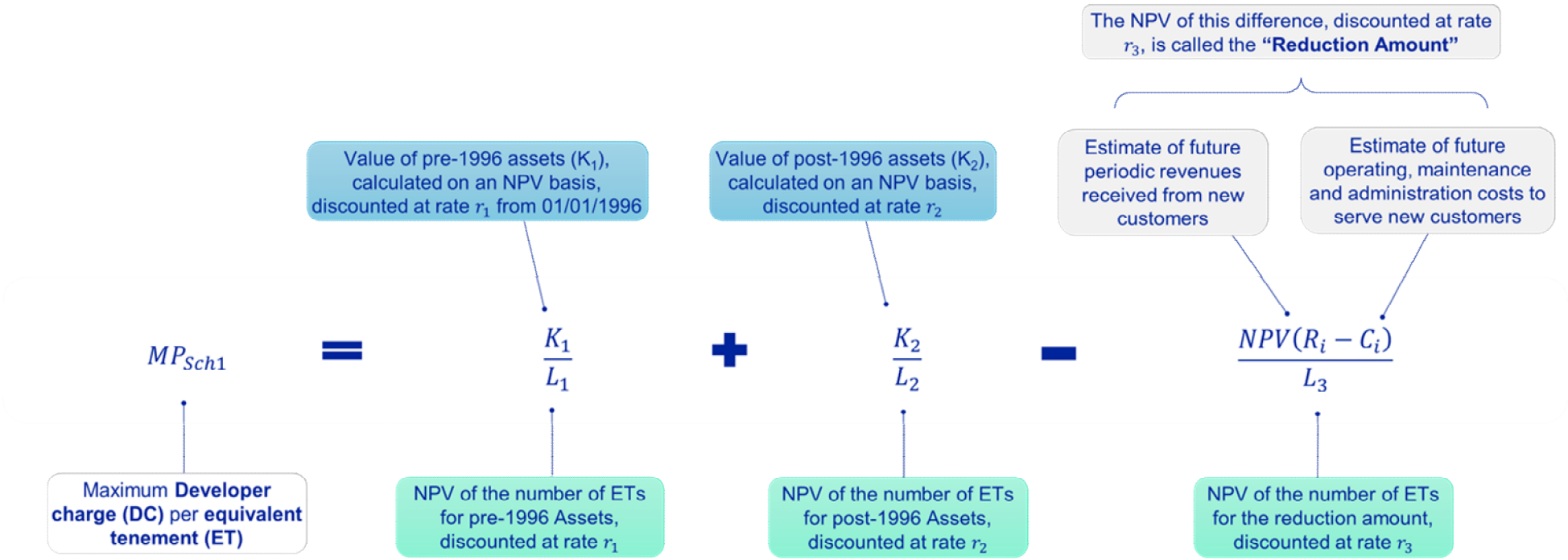
[11] NSW Productivity Commission (2020) *Review of infrastructure contributions in New South Wales – Final Report*.

5.2.2 IPART's infrastructure contribution price methodology

The method we use for setting infrastructure contribution prices has been regulated since 1995[12], and has been reviewed and updated by IPART several times. The most recent review was completed in 2018 when IPART issued a new determination[13] for calculating infrastructure contribution prices for water, wastewater and stormwater services.

The main elements of IPART's pricing method are shown in (Figure 5-1)

Figure 5-1 IPART's infrastructure contribution pricing method



Note: for this DSP, one ET = ~0.105 hectares, so, each hectare will be charged as ~9.528 ETs. There is no stormwater headworks associated with this DSP, so all capital and operating costs relate to infrastructure within the DSP boundary.

[12] Government Pricing Tribunal (1995) *Sydney Water Corporation Prices of Developer Charges for Water, Sewerage and Drainage Services*.
[13] IPART (2018) *Maximum prices for connecting, or upgrading a connection, to a water supply, sewerage, or drainage system*.

Some of the key features of IPART's method include:

- Both past and future assets are included, as past assets can provide capacity to serve development for many years into the future.
- Because we are dealing with past and future quantities, all inputs are converted to a common base year using a process known as discounting. Discounting converts past or future values into their equivalent value today.
- Discounting means that, everything else held constant, all developments pay the same (real) price regardless of when they occur.
- Costs are shared based on demand for services. The unit of demand is an 'equivalent tenement', which is defined as the total annual demand of a single, detached residential dwelling.
- Credit is given for the future revenue we will receive from new connections over the next 30 years, less operating and maintenance costs. This is because the total cost to deliver services is funded by both customer prices and infrastructure contributions. IPART also ensures costs are not recovered twice when they set customer prices, by deducting infrastructure contributions from our revenue requirement before calculating customer prices.

If development can be served at a low cost, the infrastructure contribution will be lower. For some water and wastewater systems, the cost to provide new connections is so low that the infrastructure contribution is zero for that connection in that area.

5.2.3 We are not able to implement other pricing methods

From time to time, stakeholders have proposed we use other pricing methods and/or have made suggestions about how we might implement IPART's method. Sydney Water aims to be easy to deal with and provide value for money for all customers, including developers.

While we think there are aspects of IPART's method that could be improved, a full review of the method was completed in 2018, and stakeholders had an opportunity to suggest changes at that time. Under our Operating Licence, we must set the level of fees and charges in accordance with any relevant IPART price determination, which includes the 2018 Determination.

5.2.4 Standards of service we must meet

This section sets out the standards of service provided to customers and the design parameters for our assets. This information is required under Schedule 4, Clause 1(f) of the 2018 Determination. Sydney Water is a statutory state-owned corporation (SOC), wholly owned by the NSW Government, established under the *Sydney Water Act 1994* to provide the following principal functions[14]:

- Storing or supplying water
- Providing sewerage services
- Providing stormwater drainage systems
- Disposing of wastewater.

Sydney Water can only carry out these functions under the authority of an operating licence inside a defined area of operations. Our Operating Licence[15] contains terms and conditions that we must meet when performing our principal functions, including quality and performance standards. Sydney Water is also required to maintain various management systems, including an asset management system that is consistent with AS ISO 55001:2014. The standards of service that the Rouse Hill stormwater system was designed to meet specifically are outlined in Section 2.5 Design parameters and assets.

5.2.5 Choosing Development Servicing Plan areas

Sydney Water defines DSP areas. This information is required under Schedule 4, Clause 1(c)(2) of the 2018 Determination.

While IPART's infrastructure contribution method involves the calculation of prices for a discrete DSP area, the 2018 Determination does not prescribe how to set DSP areas. The Final Report accompanying the 2018 Determination included the following guidance:

> Developer charges should signal the location-specific costs of development. If DSP areas are too small, the administrative costs ... may be too high and there may be undue price variations between areas and even, over time, within an area. On the other hand, if DSP areas are too large, costs could be averaged across disparate areas, lowering administrative costs but nullifying the price signal. Our current approach is to not prescribe how to set DSP areas; therefore, utilities can balance cost-reflectivity and administrative costs.[16]

[14] Sydney Water Act, s 12
[15] https://www.sydneywater.com.au/content/dam/sydneywater/documents/operating-licence.pdf
[16] IPART | Final report – maximum prices to connect, extend or upgrade a service, p 63

In this DSP we propose to adopt the same natural catchment boundary that was used in the 2006 stormwater DSP for this area. The scheme works in tandem with the recycled water and wastewater systems to protect the waterways within and downstream of the catchment. It would not be administratively efficient to adopt smaller boundaries, such as sub-catchments. The advantages of adopting the 2006 DSP boundary are:

- Cost and growth input to the calculations in this DSP can be more easily compared to previous versions
- Costs and timing of infrastructure are relatively certain for this whole of catchment boundary (compared to sub-catchment boundaries)

The main advantage of a wider DSP boundary is that development forecasts for larger areas tend to be closer to actuals than for smaller areas. This mitigates the risk that if development becomes significantly delayed from the forecast used to calculate the DSP, the contribution cost increases and must be revised upwards. Stakeholders have told us they value certainty in development related costs. As such, we have maintained the wider boundary for this DSP so consider it unlikely Sydney Water would need to revise this DSP at short notice because of significant changes to development profile. In absence of significant change, DSPs must be still reviewed every five years.

5.2.6 Equivalent Tenements definition

The infrastructure contribution price is the amount that must be paid by one equivalent tenement (ET). IPART's 2018 Determination defines one ET as being equal to the annual total demand of an average detached, single residential dwelling, but provides no further definition of what that demand is. IPART also decided not to specify any values for an ET in their 2020 nor their 2025 price determinations, which means Sydney Water must define this for each DSP.

The intent of IPART's method is that costs are shared based on the relative demand for our services from each new connection. We have defined demand for stormwater as a function of land area (property area, in hectares) regardless of specific land use (for example, residential or non-residential).

The 2018 Determination requires that we use location specific data where available[17], as opposed to Sydney-wide averages. Our definition of ET in this DSP relates to the existing and future developed area within this catchment. In this way, the definition is specific to this DSP area in it ensures contributions are shared equally by all development only in this catchment, rather than reflecting an average contribution rate calculated across a wider area.

5.2.7 Historic and future stormwater ETs

We have defined stormwater ETs as being proportional to the developable area of a property. This is consistent with how other stormwater infrastructure contributions are levied (eg. Council s7.11 contributions) and recently registered Mamre Rd DSP. As such, we have incorporated a consistent approach to these related contributions have been calculated in this stormwater DSP.

[17] See, for example, Schedule 5, clause 5(b)

5.2.8 Forecasting future demand for new connections

Forecasts of new demand for our services reflects growth intelligence known to Sydney Water, which is sourced from:

- development or site-specific information obtained directly from our developer customers
- published government data (eg, DPHI Growth Forecasts and Sydney Housing Supply Forecast))
- Section 78 development referrals[18]
- precinct-specific forecasts provided by the Department of Planning and/or local councils.

For this DSP, the precinct contains a mix of residential and non-residential areas and growth is forecast to occur across the precinct. The total area of all property which is expected to develop in the future is greater than the total undeveloped area that currently exists. This means that infill or redevelopment of existing properties is expected. It is important that the charge calculation does not over-estimate total growth (as this would artificially reduce the charge). It is equally important to recognise that redeveloped properties will have already complied with contribution requirements at the time they first developed, and these previous contributions must be recognised.

To ensure no double counting of development within the charge calculation, we adopted a method to only include the net increase in demand on the stormwater system. This is shown in Box 1.

To ensure that properties are not double charged if they are redeveloped in the future, we propose to adopt the redevelopment credit mechanism described earlier in this document in Section 2.3 *How do I apply the charge to my development?*

Box 1: Method to estimate existing and future stormwater demand

A = Total net developable area (NDA)
This is the sum of the total residential and non-residential zoning within the catchment adjusted for non-chargeable areas. Section 2.3.1 NDA vs Non-Chargeable Area describes how we have differentiated between chargeable and non-chargeable areas

B = Area already developed: existing properties
This is the sum of the areas of existing developed properties from Sydney Water's customer and billing database

Total future growth = A – B

[18] Under Section 78 of the Sydney Water Act, consent authorities such as the Department of Planning and local councils must refer impactful development applications to Sydney Water. These referrals alert Sydney Water to upcoming development and any potential impacts to our assets.

5.2.9 Residential vs non-residential forecasts

While we can distinguish between residential and non-residential developments in our forecast, this distinction is not as relevant for the demand placed on the stormwater system. The system must cater for the potential that connected development may reduce their total permeable area in the future. As the driver of demand is the quantum of impermeable surfaces, we have assumed these will not materially differ between residential and non-residential developments in the longer term.

5.2.10 Excluded assets

IPART's pricing method only allows Sydney Water to recover the costs of infrastructure where there is a nexus to development. That is, the need for investment is due to an increase in demand for our services – in other words, but for the increase in demand we would not need to invest. IPART's 2018 Determination requires[19] that the following assets must be excluded from a DSP area:

a) that part of an asset provided for a reason other than to service a growth area;

b) that part of an asset that services other DSP Areas;

c) the capacity of an asset that was made available by changes in land use patterns, or by changes in average demand;

d) any asset or part of an asset that was unreasonably oversized relative to system and capacity requirements, based on available demographic data at the time it was commissioned; and

e) any asset or part of an asset funded by Developers and transferred free of charge to the Agency.

In addition, IPART has specified several principles that apply when deciding what assets are included in the price calculation. For example, Schedule 5, clause 2.4(d) provides that:

> *(1) an Agency temporarily supplies services to a Development from an existing Asset; and*
>
> *(2) the Agency transfers the supply of services to the Development from the existing Asset to the new Asset that has just been commissioned;*
>
> *then only the costs of the new Asset may be included in calculating maximum prices under this determination.*

We have removed all excluded assets from the calculations in this DSP (see also section 5.2.14).

[19] Schedule 7, definition of Excluded Assets.

5.2.11 Commissioned assets

IPART's infrastructure contribution pricing method requires[20] that all commissioned assets must be valued using a valuation method known as the Modern Engineering Equivalent Replacement Asset (MEERA). In this DSP we have adopted values taken or derived from our Fixed Asset and Technical Asset registers (FAR and TAR) which reflect the most recent available MERRA assessment for each asset.

5.2.12 Uncommissioned assets

IPART's infrastructure contribution pricing method requires[21] that uncommissioned assets must be valued at their efficient cost, which is essentially equivalent to the MEERA values for commissioned assets. Section 5.2.4 of this report describes the service standards we are required to meet, and the performance criteria we typically use to assess whether our existing assets can cater for current and project demand.

Our planning process proceeds with an increasing level of detail as we gain more information about the size, location and staging of new development. Although we aim to identify the most efficient solution at each stage, the final solution that we ultimately deliver may differ from the solution identified in an earlier stage of planning. Cost estimates will also be reviewed and updated at each stage, with increasing levels of confidence as we move towards physical delivery of assets (or other solutions).

We have used the following data sources to identify future capital expenditure:

- Individual project or program business cases with dollar estimates at P90 level needed to meet new demand due to growth
- Renewals of commissioned linear and non-linear assets.

5.2.13 Apportioning asset values

It may be appropriate to apply multiple levels of cost apportionment where an asset serves:

- multiple DSP areas
- both past and future development.

In this DSP, the stormwater assets only service the Rouse Hill catchment and there are no headworks assets which also serve other DSP areas. Therefore, no adjustment was made to account for assets serving multiple DSP areas.

[20] See Schedule 5, clause 2.1.
[21] See Schedule 5, clause 2.1.

Since the catchment area contains commissioned assets, we've applied a utilisation factor to apportion the capital cost of each commissioned asset between existing and future ETs that receive a service from these assets. The factors adopted exclude the share of costs for development (ETs) that had already connected before 1 January 1996. This means that around 10 per cent of all commissioned asset costs have been excluded from the infrastructure contribution price calculations.

5.2.14 Adjustment for assets contributed by developers (Assets free of charge or non-cash contributions)

IPART's infrastructure contribution pricing method requires that any asset or part of any asset which is funded by developers and transferred free of charge to the agency must be excluded from the relevant DSP charge calculation. Therefore, we have applied a gifted asset reduction factor to exclude the value of all gifted assets from the charge calculations.

All gifted assets in Rouse Hill Stormwater catchment are linear in nature. Therefore, we applied the reduction factor to the sum of the MEERA valuation of linear assets within the system on a year-by-year basis. The reduction factor for assets commissioned in each year was calculated to exclude the proportion of gifted assets relative to total linear asset value of assets commissioned that year as recorded in our Fixed Asset Register.

5.2.15 Choice of investment horizon

IPART's 2018 Determination for water, wastewater and stormwater requires[22] us to maintain enough DSPs, covering a large enough geographic area, to capture all current demand and expected medium-term growth in the demand for our services.

The phrase *medium-term* is not defined, leaving some flexibility to decide how much future investment will be included in those infrastructure contribution prices. For example, if future development beyond 20 years is uncertain within a DSP boundary, we might choose to limit the time horizon when calculating infrastructure contribution prices for that DSP area.

In our previous water and wastewater DSPs, in 2006, we generally adopted a five-year investment horizon. However following the results of stakeholder engagement, and the uncertainty regarding the timing and value of longer-term asset delivery, we exhibited and then adopted a 10-year investment horizon for the water and wastewater DSPs currently registered with IPART. In this DSP we have also limited the forecast of new investment in assets to match that proposed in our recent retail price review which is a 10-year forecast. However, consistent with the recent Mamre Road integrated stormwater DSP, we have adopted a 30-year forward looking investment horizon for asset renewals to better reflect the total expected incremental cost to serve development within the catchment.

[22] See Schedule 4, Clause 1.

5.2.16 Net operating result

Each new connection in a trunk drainage system catchment results in:

- Additional revenue from regulated service stormwater usage prices; and
- Additional operating costs as end-use customers make use of our services.

Regulated service and usage prices are designed to allow Sydney Water to recover the efficient cost of providing services using IPART's Building Block Method (BBM) and are set in such a way that each type (or class) of customer pays the same price no matter where they are located (an approach known as postage stamp pricing). In other words, these prices are a measure of the average cost of providing a customer with a service, considering the net cost of building, operating and maintaining existing and future assets.

IPART's infrastructure contribution pricing methodology takes incremental revenue and operational costs into account as part of setting a price for a specific DSP area. If servicing costs in a DSP area are very low, the normal ongoing revenue from each new customer can be enough or more than enough to cover the cost of providing new development with services. In these cases, it is possible that no infrastructure contribution will be payable for these low-cost areas.

In areas with higher costs, the developer must contribute because revenue from new customers is not sufficient to fully recover incremental costs. If we did not collect a contribution for the new connections required by developers, bills for all other customers would have to increase. Without a framework for infrastructure contributions, the additional costs of new growth are recovered through service contributions from existing customers, placing additional pressure on general water, wastewater and stormwater prices and household bills.

5.2.17 New connections

Our approach to forecasting new connections is discussed in section 3.2 & 5.2.8 of this report.

By forecasting the number of new properties expected to connect and applying the stormwater service charges IPART set in the 2025 Final Determination, we have forecast the additional revenue that will be generated. Residential development is expected to contribute most of this revenue, as they make up most of the new net developable area. Non-residential areas, while smaller in number, also contribute depending on the size of each development. Incremental revenue from all sources is capped to reflect the total amount of land available for development in the catchment.

When calculating revenue from new non-residential connections, we use the forecast of the number of new ETs. As it generally takes up to two years before a developed property is occupied and connected to and begins to pay for services, our forecast of new ETs for revenue calculation lags that for development by one year.

5.2.18 Revenue from new connections

Revenue from new connections is influenced by both the number and type of new connections, as well as the structure of new stormwater service charges from the 2025 Final Determination. For this DSP, we have considered revenue solely from stormwater service charges.

Currently, stormwater service charges for non-residential properties are applied across five discrete bands, which are broadly proportional to property area - larger properties incur higher charges. As the size of future individual properties within this DSP area is not yet known, we have estimated a mix of property sizes based on the current distribution of property types that currently exist across the catchment:

- 84 per cent of non-residential developable area is expected to comprise "large" lots, subject to the 1,001 m^2 to 10,000 m^2 stormwater charge.
- 10 per cent is projected to be "medium" lots, subject to the 201 m^2 to 1,000 m^2 stormwater charge.
- The remaining 5 per cent is anticipated to be small lots, subject to the less than 200 m^2 stormwater charge.

Note: Percentages are rounded to the nearest whole number; therefore, the total above may not equal 100 per cent.

5.2.19 Operating Costs

The future operating and maintenance costs for the Rouse Hill stormwater DSP are based on the inputs and assumptions used in Sydney Water's Statement of Corporate Intent (SCI) 10-year forecast. These include year by year estimates of OPEX for maintenance and corporate overheads. Consistent with the efficiency assumptions in the 10-year forecast, the total operating costs for maintenance and administration of the system will remain constant across financial years 2035-36 to 2054-55. The only exception to this assumption is the cost of condition assessments, which are scheduled to occur every 10 years.

Costs include:

- Maintenance cost (operation of conducting condition assessments every 10 years, monitoring plan, GPT maintenance, bush regeneration and weeding control). The GPT maintenance cost is based on the average of historical costs over the past five financial years to account for variability due to changing weather conditions.
- Land Tax (based on the Valuer General assessments for Sydney Water owned land in Rouse Hill. We have assumed no increase over the 30-year forecast period)
- business costs (allocated proportional share of Sydney Water's corporate costs in line with 2024-25 SCI Budget)

The incremental operating and maintenance costs to provide services to new development are calculated based on the total operating cost multiplied by the proportion of the incremental development included in this DSP relative to the total development connected within the catchment boundary in each year. The total cost to operate the system is just over $6 million each year so the costs included in the DSP increase in line with the incremental development forecasts, reflecting a small proportion at first, but gradually increasing to around 10% of the total as shown in Figure 5-2.

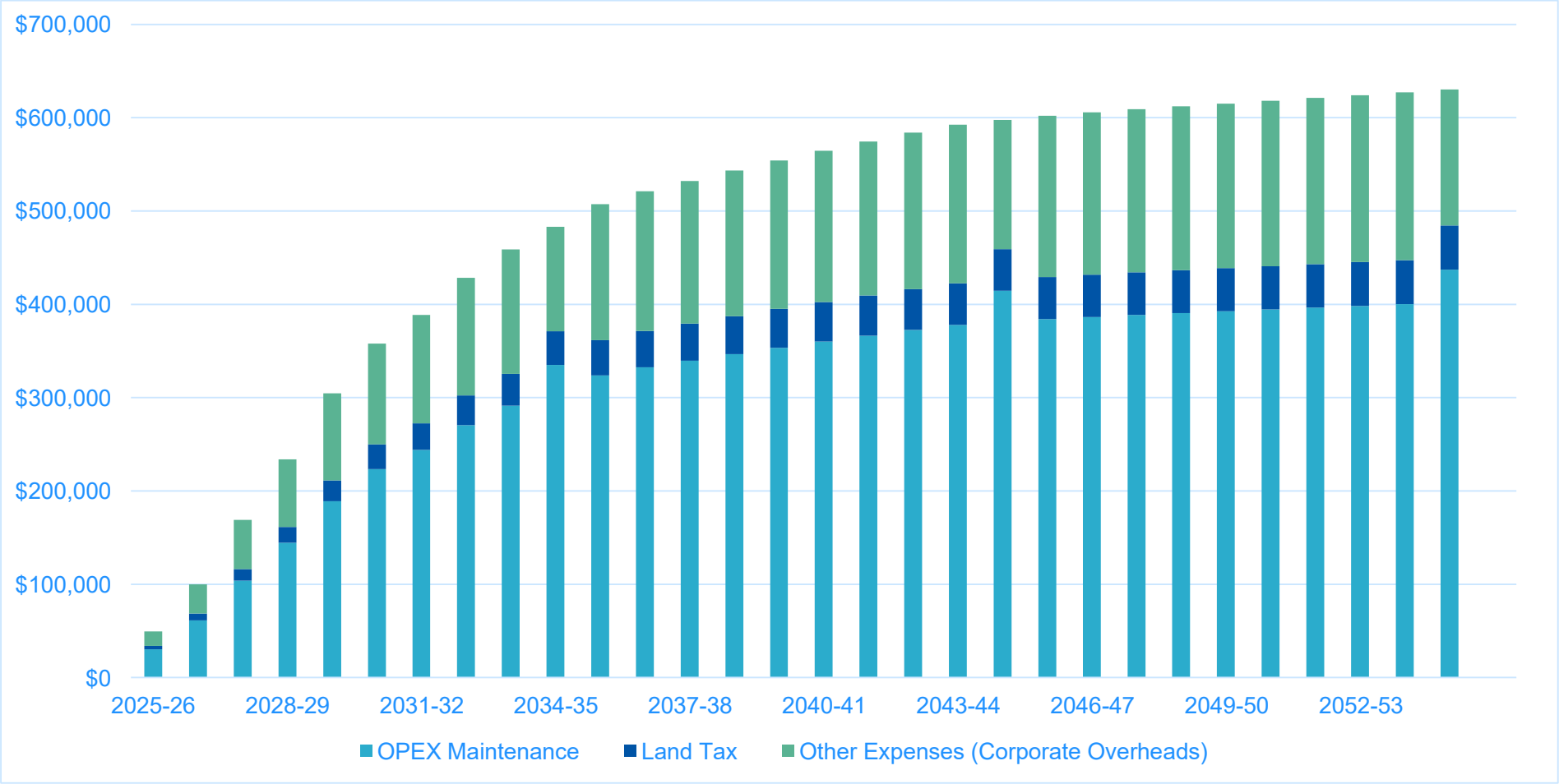


Figure 5-2 Forecast incremental operating expenditure ($2025–26)

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