SUSTAINABILITY DEEP DIVE SERIES FY20

Water Management and Quality

Why this is important to Stockland

Water is essential for environmental and social health. It also enables us to develop and manage our assets and plays an important role in making our communities and assets attractive, healthy and efficient places in which our customers want to live and work.

Australia's climate is characterised by variability, featuring long-term drought, water scarcity (often resulting in water restrictions) and severe flooding. As a responsible property developer, we consider where water is sourced, how efficiently it is used and how quantity and quality is managed. We maintain a strong focus on water management and quality in the development and operation of our assets, including improving the quality of rainwater run-off leaving our project sites, access to alternate water infrastructure and practical innovation to support more efficient water use.

Maintaining effective water management systems to minimise consumption and manage water quality is a key priority. Effective systems deliver significant benefits to the environment and promote performance and cost efficiencies across our projects and operations.

This Deep Dive document is a component of our FY20 sustainability reporting suite, which is publicly available on our **website**. Our sustainability reporting is prepared in adherence to the International Integrated Reporting Framework principles of materiality, stakeholder responsiveness, reliability and completeness; in accordance with the GRI Standards[1](Comprehensive); and is **third party assured**. The material in this Deep Dive is supported by a wider collection of performance metrics contained in our **Environmental Data Pack**.

This Deep Dive is to be read in conjunction with our published approach to water management, available as part of our sustainability reporting suite at Our **Management Approach to Water Management and Quality**.

Stockland's Sustainability Strategy

OPTIMISE & INNOVATE

- Asset rating and certification[1,2]
- Biodiversity
- Carbon and energy
- Climate resilience
- Waste and materials
- Water management and quality

1 Management Approach only
2 Reported in our Environmental Data Pack

[1] The GRI Standards are global standards for sustainability reporting published by the Global Reporting Initiative (https://www.globalreporting.org/standards/)

Our key achievements

- Reduced water intensity of our Retail Town Centre portfolio by 11 per cent compared to our FY17 baseline.
- Connected 14 of our residential sales offices to rainwater or centralised recycled water supply.
- Achieved a 9 per cent improvement over local compliance requirements, saving 7.6ML of water and exceeding our residential built form water consumption design target of 5 per cent.
- Investigated the extent of water scarcity across Australia to better understand the implications for Stockland's property portfolio and our future role in contributing to water system resilience.

Water intensity reduced

11%

in our Retail Town Centre portfolio since FY17

Water savings

9%

improvement over code compliance

FY20 targets and progress

Commercial Property

Optimise and innovate

Focus area	Target	FY20 progress	Status	Future priorities
Focus on water efficiency and sustainable sourcing	Reduce water consumption by five per cent by FY20 in our Retail Town Centre portfolio against the FY17 baseline.	Achieved 11 per cent reduction against the FY17 baseline	Achieved	Maintain water intensity in our Retail Town Centre portfolio at the FY20 baseline.
	Reduce water consumption by five per cent by FY20 in our Workplace and Business Parks portfolio against FY17 baseline.	Achieved 14 per cent reduction against FY17 baseline	Achieved	Maintain water intensity in our Workplace and Business Parks portfolio at the FY20 baseline.
	Achieve a NABERS Water portfolio average of 3.5 stars for our Retail Town Centre portfolio by FY20.	Achieved a portfolio average NABERS Water rating of 3.41 stars. Achieving high NABERS Water ratings in Retail is challenging due to the impact of high-water-consuming tenants.	Not achieved	Maintain an average NABERS Water portfolio rating in our Retail Town Centre portfolio at the FY20 baseline.
	Achieve a NABERS Water combined portfolio average of 4 stars for our Workplace and Business Parks portfolio by FY20.	Achieved a combined portfolio average NABERS Water rating of 3.76 stars. Achieving NABERS Water ratings continues to be difficult in the Workplace and Business Parks portfolios as these assets typically have water features, end of trip facilities and large landscaped areas that require high maintenance.	Not achieved	Maintain an average NABERS Water portfolio rating in our Workplace and Business Parks portfolio at the FY20 baseline.

Communities

Optimise and innovate

Focus area	Target	FY20 Progress	Status	Future priorities
Focus on water efficiency and sustainable sourcing	Exceed relevant minimum water consumption compliance standards in our residential homes by five per cent by FY20.	Achieved a 9 per cent improvement over code compliance.	Achieved	Exceed relevant minimum home water consumption compliance standards by five per cent in our residential communities and retirement villages in FY21.
	Establish a water efficiency program that embeds the recommendations derived from the sub-metering and monitoring pilot and seeks to achieve a five per cent water efficiency target for villages in sub metering by FY20.	Pilot was not continued in FY20 due to monitoring vendor ceasing operations.	N/A	Develop sustainability plans for each Retirement Living village that incorporates water profiles and potential efficiency opportunities and NABERS targets.
	Complete an operational efficiency review of our three most water intensive retirement living communities.	Analysis could not be completed due to monitoring vendor ceasing operations.	N/A	Develop sustainability plans for each Retirement Living village that incorporates water profiles and potential efficiency opportunities and NABERS targets.
Deliver projects that minimise water use and minimise our impact on water quality entering natural waterways	All new residential masterplanned communities and built form projects over 500 dwellings to deliver the following modelled water quality targets when discharging water from our site into natural water systems: • 45 per cent reduction in nitrogen • 65 per cent reduction in phosphorus • 85 per cent reduction in suspended solids	In FY20 there were no projects for which Water Sensitive Urban Design (WSUD) strategies were finalised, however 73% of our projects have achieved all of our WSUD targets against modelled base case since 2015.	Not achieved	All new residential master-planned communities and built form projects over 500 dwellings to deliver the following modelled water quality targets when discharging water from our site into natural water systems: • 45 per cent reduction in nitrogen • 65 per cent reduction in phosphorus • 80 per cent reduction in suspended solids

Transitioning targets for FY21

Due to the business challenges associated with the COVID-19 pandemic, we have delayed the launch of our new 2030 Sustainability Strategy and its associated long-term targets. Our new strategy and next three-year cycle of water targets (FY22-24) will be launched in FY21. Where feasible, we have rolled over our FY20 three-year targets for an additional year to maintain our focus on sustainable outcomes for our stakeholders.

FY20 performance and case studies

Commercial Property

NABERS Water Ratings

Retail

Following the NABERS Water ratings undertaken in FY20 on our Retail Town Centre portfolio, the area weighted portfolio average has improved to 3.41 stars (3.35 stars in FY19) however we have not achieved our target of 3.5 stars for FY20 in absolute terms. This year we have rated some of our smaller retail centres for the first time, including Harrisdale (NSW), Balgowlah (NSW) and Birtinya (Qld), with the introduction of a new NABERS methodology for rating small retail centres. Therefore, considering changes in the rated portfolio for FY20, including some asset sales, the like for like portfolio average is 3.6 stars.

Achieving high NABERS Water ratings in retail is challenging due to the impact of high-water-consuming tenants such as seafood markets, food courts, gymnasiums and hair salons. Four retail assets received an improved rating, while five assets received a lower rating. Twelve retail assets out of 26 achieved 4 stars or better and three have achieved 5 stars.

Workplace and Business Parks

In our Workplace and Business Parks portfolio, the NABERS Water area weighted portfolio average has improved to 3.83 stars (3.61 stars in FY19) for Workplace and 3.70 stars (3.26 stars in FY19) for Business Parks. The combined NABERS Water portfolio average for FY20 is 3.76 stars. This is an increase on FY19 (3.47 stars) however we have not achieved our target of 4 stars for FY20 in absolute terms or on a like for like basis, taking into account asset sales and vacancy.

The average excludes the Durack Centre and 2 Victoria Avenue (WA) and Optus Centre (NSW) due to faulty utility metering and consumption estimates, which prevented ratings being undertaken this year (faulty meters have since been replaced and we will have ratings for these two locations in FY21). There are no ratings this year for 11-17 Khartoum Road Macquarie Park (NSW) as this site is subject to redevelopment, and 350 Wellington Road Mulgrave (Vic) due to vacancy during refurbishment.

Achieving NABERS Water ratings continues to be difficult in the Workplace and Business Parks portfolios as these assets typically have water features, end of trip facilities and large landscaped areas which require high maintenance activities to ensure they continue to present well to tenants. Two Workplace and Business Park ratings fell and four improved, with four assets out 14 achieving 4 stars or better.

More information on our NABERS Water ratings is provided in our **Environmental Data Pack**.

Initiatives and performance metrics

In FY20 we continued to see the benefits of our comprehensive sub-metering network across our Commercial Property assets, with the installation of additional water sub-meters across nine Logistics assets taking the total sub-meters to 42. We also saw savings of 95,000kL (in prevented leaks) for Retail assets over the course of the year.

We track our water consumption on a per square metre intensity basis as a means of taking divestments and investments into account. The table below outlines our year-on-year water intensity in Commercial Property over the last five years.

Commercial Property water consumption intensity (kL/m²)

	FY20	FY19	FY18	FY17	FY16
Workplace and Business Parks	0.55	0.62	0.67	0.64	0.65
Retail Town Centres	0.97	1.05	1.04	1.09	1.11
Total Commercial Property	**0.88**	**0.96**	**1**	**1**	**1**

Commercial Property water consumption intensity reductions

	Annual Intensity Change (%)				
	FY20	FY19	FY18	FY17	FY16
Workplace and Business Parks	-11%	-7%	5%	-5%	12%
Retail Town Centres	-8%	1%	-5%	-2%	0%
Total Commercial Property	**-8%**	**0%**	**1%**	**-5%**	**4%**

Communities

Residential

Residential contractor water data varies from year to year due to activities such as filling lakes in large developments and location-specific variables such as natural rainfall, project life cycles, market conditions, site management techniques and local landscaping requirements set by councils. In addition, contractors self-report water data and we do not review each contractor's data collection processes. This year we upgraded our contractor reporting system to enhance contractor reporting processes.

Water efficiency

Our current Residential water targets (set in FY18) focus on the performance of our built form product, which is under our control. These targets aim for a five per cent improvement in the performance of built form product by FY20, compared with existing water reduction compliance benchmarks established by regulation within the states where we operate. We model and analyse the performance of our built form product in our Residential communities in order to understand water-related initiatives that we could include in our designs to exceed compliance requirements by five per cent or more. During FY20 we modelled and analysed the performance of 566 homes, and we achieved a 9 per cent improvement against water benchmarks, representing a saving of 7.6ML per year when compared to homes built to regulation. This result is largely attributable to the installation of water-efficient fixtures and appliances, rainwater tanks and water-efficient landscaping.

Other water efficiency initiatives delivered in FY20 include:

- Collecting rainwater run-off in basins for reuse to suppress dust at our South East Queensland projects, including Newport, Vale, Pallara, Augustine Heights, Highland Reserve, Pallara and Foreshore.
- Connecting 14 of our sales offices to either rainwater or centralised recycled water supply.
- Using passive irrigation and low-water tolerant species such as Australian native plants in our landscaping, public open space and verges, minimising irrigation requirements at a number of projects across the country such as Willowdale (NSW), Whiteman Edge (WA), Sienna Wood (WA) and Sovereign Pocket (Qld).

- Delivering parks in Western Australia, such as at Sienna Wood, during winter to improve water saving and survival rates of landscaping.
- Installing in-ground rainwater tanks on all our Medium Density homes at our Altrove project in North West Sydney.
- Requiring all front landscaping at Calleya in Western Australia, to be designed in accordance with WA Water Corporations Water Wise Garden standards.
- Making mandatory the installation of rainwater tanks on all homes on lots greater than 225m^2 at Aura on the Sunshine Coast. Also providing education opportunities for new residents via access to information about water efficiency at display villages and as part of our resident welcome packs.
- Connecting a number of our Victorian projects to centralised recycled water schemes, for example, the irrigation of open space at Cloverton is serviced by recycled water.

Water quality

We use Water Sensitive Urban Design (WSUD) strategies at our residential developments to minimise the impact these developments have on water quality entering our natural waterways. In FY20 there were no projects for which WSUD strategies were finalised, however 73% of our projects have achieved all our WSUD target reductions against modelled base case since 2015. When we looked at each target individually, 14 out of 15 projects achieved our nitrogen 45% reduction target, 13 out of 15 achieved our phosphorus 65% reduction target and 6 out of 15 projects achieved our suspended solids (SS) 85% reduction target.

We engaged Alluvium WSUD consultants to better understand our results. Alluvium concluded that SS 85% was a particularly ambitious target and would come at significant cost to projects if we were to drive the target hard. When we reduced the SS target in line with most jurisdictions across the country to 80%, we achieved 14 out of 15 projects, achieving compliance and an overall performance score of 91% across the three water quality measures. We concluded that we would amend the target in line with the performance requirements of local authorities and government organisations for FY21 and that we would look at what cost and benefit would be derived from establishing a suite of stretch targets beyond FY21. It is important to note that our results reflect the quality of water leaving our site boundary and in some cases we will agree with local authorities to make a contribution to a wider catchment strategy rather than undertake water quality initiatives on our site. In these circumstances the wider catchment result may not be reflected in our results shown in this document.

WSUD applications are generally aimed at delivering water quality improvement following completion of development. We also minimise pollution during construction through delivery of sediment and erosion control plans. Water run-off is captured in basins and treated with flocculents to allow suspended solids and pollutants to settle out of the water column.

Retirement Living

We engaged in a pilot study at The Willows (NSW) and Tarneit Skies (Vic) to monitor water consumption. The pilot commenced monitoring in FY17 and ceased in FY19 as a result of the monitoring vendor ceasing operations. At that point in time the monitoring for water at the village site level was highlighting a 13.7 per cent increase in water consumption at Tarneit Skies (Vic) and 36 per cent decrease in water consumption at The Willows (NSW). These performance results were inconclusive given that the project was incomplete and other village specific variables such as residential unit vacancies, weather conditions and unintended water usages were not considered. There were a number of observations made that will feed into future water efficiency reviews, such as the need to establish more granular sub-metering to differentiate between common area and residential units' usage. This will help to define behavioural usage patterns and ultimately improve our analysis for water management and conservation.

In FY20 we continued to meter and monitor using the WaterGroup IoT water meter at MacArthur Gardens (NSW). The change from a standard utility meter to a "smart" meter for water has meant consumption can be monitored online via a portal.

CASE STUDY

DELIVERING WATER RESILIENT COMMUNITIES

In March 2020 Stockland purchased The Gables, a 293 hectare masterplanned community at Box Hill in Sydney's North West. The project is located close to rail and town centres and includes 75ha of parks and a large lake. Over the life of the project we will deliver around 1,900 homes to The Gables community.

Unique to The Gables is the way water is supplied to the project. New homes will be connected to a sustainable water network providing recycled water as well as drinking water, saving money for residents and reducing the burden on Sydney's potable water supply. Recycled water can supply up to 70% of resident requirements, including gardens, toilets, washing machines, and irrigation of public parks and open space. The water recycling and supply system is operated by Box Hill Water, an independent utility providing recycled water and sewer services to the community, while Sydney Water will provide drinking water. Box Hill Water will harvest wastewater from household kitchens, bathrooms and toilets, extract clean water and provide it back to homes and public spaces through the recycled water purple pipes.

After witnessing one of the worst droughts on record during 2020, Stockland's ambition to improve the water resilience of our communities and cities has never been stronger. We are reviewing opportunities to build greater water and drought resilience around the country. In fact, we will be introducing new strategic objectives into our projects that require all our masterplanned communities to investigate whole of water cycle management opportunities, which will result in water savings. With the purchase of The Gables we have made a great start.