

Biodiversity

FY18

Why this is important to Stockland

We develop new land for housing, including infrastructure and social amenities, to create sustainable, thriving communities. Development brings challenges and opportunities that we manage as we deliver our projects. In particular, developments on greenfield sites can impact local bushland habitat, ecological communities and protected or significant species.

As part of our strategy to deliver shared value, we aim to minimise and mitigate these impacts to protect the biodiversity of our surrounding environments. We appreciate that preserving biodiversity enhances the liveability and vitality of our communities over the long term. Our Liveability Index survey results tell us that our residential customers value green space and a connection to nature. We also understand the inherent value of biodiversity conservation for protecting the values of Australia's unique flora and fauna. We therefore seek to balance developable land with retention and activation of biodiversity to enhance the long-term success of our masterplanned communities. By proactively minimising and mitigating the impacts on biodiversity, we are also able to have more productive conversations at all levels of government on our development proposals.

The impacts of our business on biodiversity are, for the most part, unique to our greenfield residential developments and in particular our masterplanned communities. These impacts may occur both during construction (e.g. clearing, sediment runoff, changed hydrological regimes) and as a result of urbanisation (e.g. poaching species, introduction of invasive species, isolation of habitat).

This Deep Dive document is a component of our FY18 sustainability reporting suite, which is publicly available on our [website](#). Our sustainability reporting is third-party assured and drafted in accordance with the GRI Standards.¹ 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 biodiversity, available as part of our sustainability reporting suite at [Our Management Approach to Biodiversity](#).



Our key achievements

- Protected around 2,202 hectares of land, upon completion of our current developments, for the purposes of managing biodiversity in perpetuity (including land both on our sites and land offsite dedicated as an offset for biodiversity).
- Worked to rehabilitate and restore 204 hectares of biodiversity during the year.

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

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FY18 priorities and progress

FY18 PRIORITIES	STATUS	FY18 PROGRESS
For new masterplanned residential communities being planned from FY18, make an aggregated net positive contribution to the biodiversity value by FY20 as determined by the biodiversity calculator.	In progress	The only project with significant biodiversity value assessed in FY18 was Mt Atkinson (Vic), which achieved a positive impact score of 11.94 according to our biodiversity calculator.

FY18 performance and case studies

We have identified biodiversity that will be protected on site in 20 of our projects under construction in FY18. We will have placed approximately 2,202 hectares of land into protection for the purposes of biodiversity management once these projects are complete. Many of the areas identified for protection include species that are considered threatened or vulnerable.² Our biodiversity management is guided by site investigations undertaken by experienced ecologists throughout the process of masterplanning a project. Proposed conservation actions are then reviewed by the local or state regulatory authority for approval.

Our FY20 target is to make a net positive contribution to biodiversity value across our residential developments, as measured by our biodiversity calculator. The only project with significant biodiversity assessed by the calculator in FY18 was Mt Atkinson (Vic). At Mt Atkinson our overall impact will be positive once the project is complete with 39 hectares of land rehabilitated and replanted (score of +11.94). A full list of projects scored by our calculator since FY15 is provided in our [Environmental Data Pack](#). More information on the methods behind our biodiversity calculator can be found in [Our Management Approach to Biodiversity](#).

CASE STUDY

Maintaining and enhancing ecological connections

We understand that the land we own and develop exists within an ecological context that extends beyond our site boundaries. Our forthcoming residential community of over 1,600 residences at Newport (Qld) is being developed on land with little ecological value. However, it is located adjacent to the 110,000 hectare Moreton Bay Marine Park wetland of international significance (as specified in the Ramsar Convention on Wetlands).

The wetlands reserve includes different habitat types such as ephemeral freshwater wetlands, paperbark woodland and casuarina forest, intertidal mudflats and saltmarsh communities, and mangrove communities which are significant wader bird roosting areas. Bird spotters have identified 197 bird species inhabiting the area in or near wetlands. The area is also home to koalas, greater gliders, grey headed flying foxes and native orchids.

Given Newport's location adjacent to such an environmentally sensitive context, we maintained existing water flow regimes in the design of the masterplan to minimise impacts on local wetland water cycles. We also provided for a buffer area between the urban boundary and the wetland to reduce disturbance to migratory and wader birds.

We will be reconstructing and rehabilitating ecological drainage corridors through landscape management, and will reduce pollution through strategic installation of gross pollutant traps. Our work on biodiversity in and around Newport enables our development to have a positive overall impact on biodiversity value (score of +3.08).

In recognition of the opportunity to use Newport to further enhance its environmental context, the project is committed to ongoing protection and monitoring of the Ramsar wetland. We recently awarded a \$30,000 contract for litter collection and monitoring associated with the environmental management of the wetlands. Monitoring results will be used to build a greater understanding of wetland conditions and how Newport can support its local ecosystem.



Our new residential community at Newport (Qld) will make a positive contribution to biodiversity value and care for the wetlands adjacent to the community.

² A total of 50 species on our development sites are considered threatened under Australian State and/or Commonwealth legislation. Of these species 16 are included under various threatened species categories on the IUCN Red List.

Biodiversity conservation activities

We delivered 204 hectares of rehabilitation works during the year. Rehabilitation activities help support the longevity and resilience of significant biodiversity identified on our sites and is generally undertaken by specialist contractors as part of our biodiversity commitment for the project. At our Foreshore (Qld) residential community, for example, we will undertake rehabilitation works on an area of the Coomera River foreshore that is prone to erosion before we hand it over to the state government for ongoing management. We are also rehabilitating a broader area of the riparian corridor before it is transferred to Gold Coast Council for ongoing ownership and management.

We also engage local community groups in our biodiversity activities to both enhance the extent of our impact and educate local communities on biodiversity values. At Aura (Qld) we are working with Healthy Waterways and Catchments, which is managing our community reference network of up to 18 local stakeholder groups as part of our biodiversity commitment for the project. At Cloverton (Vic), stakeholder engagement for the Merri Creek masterplanning has involved Wurundjeri Tribe Council, National Pacific Properties, Hume City Council, City of Whittlesea, Mitchell Shire, Merri Creek Management Committee, Melbourne Water, Yarra Valley Water, Bicycle Network Victoria, Transport for Victoria and Department of Environment Land Water and Planning. These groups will help to define the value and biodiversity management activities planned for the rehabilitation of the Merri Creek corridor.

At Promenade (Qld), in accordance with our development approvals we removed around three hectares of vegetation not considered to be significant according to council, state, or federal regulations. We are working toward a positive biodiversity outcome for the project by exceeding regulatory requirements for water quality discharge to protect adjacent wetland ecosystems.

CASE STUDY

Boosting locally native species at Pallara

We can deliver a net positive impact on biodiversity value by providing secure tenure for conservation areas and by rehabilitating more native habitat than we remove over the course of a development.

At our Pallara (Qld) residential community development, we are replanting and rehabilitating at least 56 hectares of native bushland and waterway within the site boundary. We are also providing for a further 32 hectares to be placed into permanent conservation outside of the project boundary to offset 13 hectares of habitat loss within the project boundary. Once rehabilitated the area will be protected by Brisbane City Council as an environmental conservation reserve and community open space.

We have allocated around \$3.7 million to biodiversity restoration activities associated with the development. Suitable species native to the local area have been selected for all vegetation rehabilitation areas to build resilient habitat. We are using drought-tolerant species for open space areas to improve likelihood of survival and reduce requirements for water and maintenance, eliminating irrigation requirements.

Over 6,800 trees of species suitable for koala habitat and foraging will be planted. We also leverage locally native species in our water sensitive urban design to provide water quality filtration. In the past 12 months we have planted 72,000 plants and rehabilitated 5.6 hectares as part of a five-year site rehabilitation contract. We have installed 20 nesting boxes to improve habitat for birds, possums and other species that would typically access old growth trees with hollows.



A large proportion of our residential community at Pallara (Qld) is to become a conservation zone (green shading), with additional areas (blue and maroon shading) to undergo ecosystem rehabilitation to restore ecological connectivity within the Oxley Creek corridor.

We have installed cameras to monitor the rates of success associated with the nesting boxes and have observed gliders, bats, possums and parrots using the boxes. Results of our monitoring will help inform our understanding of how we can use nesting boxes as a means of repopulating target species.

Our focus on biodiversity at Pallara means that the development will have a positive impact on biodiversity value overall (biodiversity calculator score of +27.59).



Other project-specific examples of our conservation activities in FY18 include:

- protection of local grassland habitat for the Golden Sun Moth at Allura (Vic), which will be included in the Parks Victoria protected area estate on completion
- monitoring of the translocation of Grand Spider-orchids from within the development boundary at Calleya (WA) to an area with a large population of the orchids and managed for long term conservation
- conservation of land at Cloverton (Vic) in perpetuity by transferring ownership to either Melbourne Water or Hume City Council
- protection of ecology onsite at Brooks Reach (NSW) through a mix of land transfer and restrictive title covenants, as well as protection of additional land offsite through the [NSW Biobanking](#) scheme
- rehabilitation of 8.5 hectares of native bushland which provides habitat to koalas and wallum froglet at our Stoneridge (Qld) project, providing a corridor of valuable habitat for the species
- provision of a minimum of 200 metre development buffer along the Werribee River at The Grove (Vic), which will form part of the Werribee River Regional Park
- relocation of native animals found during earthworks at Whiteman Edge (WA)
- provided native trees to residents for planting in their gardens, and installed nesting boxes to provide habitat for native species at Altrove (NSW).



To access the complete list of documents in Stockland's Sustainability Deep Dive Series, [click here](#).