Setting new standards for on-site environmental management

The State Government is investing more than $5 million in on-site conservation programs and environmental initiatives for the Fiona Stanley Hospital project at Murdoch.

Work includes fauna relocation, flora translocation, seed collection, top soil removal and reuse, and the preservation of natural bushland on the site.

The future landscaping of the site will include linear parks, lakeside parks, reserved conservation areas, landscaped wildlife corridors, and internal plazas and rooftop gardens – all using a variety of local species wherever possible.

Protecting natural bushland

Two natural bushland areas have been retained on the Fiona Stanley Hospital site and will be protected into the future. The two bushland conservation areas, which total approximately three hectares, include high quality Jarrah-Banksia and Marri woodland.

A management plan for the two areas will be developed, and the Fiona Stanley Hospital project team is working closely with the City of Melville and Department of Environment and Conservation to ensure the long-term management and protection of these conservation areas.

Translocation of Grasstrees and Zamias

More than 200 Grasstrees and Zamias were removed from the Fiona Stanley Hospital site prior to clearing. The majority will be reused in future on-site landscaping, with the remainder to be planted at rehabilitation sites in nearby Beeliar Regional Park.

Seed collection and propagation

Seed collection has been an important part of the Fiona Stanley Hospital environmental program with almost five kilograms of seeds of 45 different species collected from the site in 2008 and again in 2009.

The seeds, which will be used for broadcast seeding and propagation for both off-site and on-site plantings, included the Dwarf Sheoak, Candlestick Banksia, Marri, Zamias and Paperbark.

Seed collection will continue during the 2010 summer months in other areas of the site yet to be cleared.

Native plants which are difficult to grow from seeds including orchids, triggerplants, sedge and herbaceous species have been recovered from the site and will be propagated for use in future landscaping on the site.

Flora recovery and translocation

The Species Orchid Society of Western Australia and other community groups recovered more than 1700 orchid specimens and other plants from the Fiona Stanley Hospital site. The orchids have been potted and will be nurtured in greenhouses. The majority will be reused in future on-site landscaping with the remainder being used for research.

Fauna relocation

A leading Western Australian fauna consultant collected Quenda (small marsupials also known as the Southern Brown Bandicoot) prior to the clearing of the Fiona Stanley Hospital site.

Thirty-eight Quenda were transferred to the Department of Environment and Conservation for relocation to Julimar Conservation Park – an area of more than 28,000 hectares located between Bindoon and Toodyay which is renowned for successful Quenda relocation.

Local licensed reptile specialists were also commissioned to relocate amphibians, including frogs and toadlets, venomous snakes such as dugites, and lizards including monitors, bearded dragons, skinks and bobtails. The program successfully relocated more than 4500 reptiles to Beeliar Regional Park.

Timber reuse

More than 80 trees were felled for relocation to Beeliar Regional Park, to provide habitat for local fauna. The trees, which ranged in length from two metres to eight metres, were identified as potential habitat logs by the Fiona Stanley Hospital's environment team with assistance from local Indigenous elders.

Banksias, Jarrahs and Marris were also salvaged and milled into useable timber, which will be used by the architects and designers in the future landscaping, finishes and furnishings in the hospital and throughout its surrounds.

Topsoil relocation

Topsoil from the Fiona Stanley Hospital site was stripped, relocated and spread across rehabilitation sites in Beeliar Regional Park and other areas near the Fiona Stanley Hospital site.

Topsoil is the upper layer of soil which has the highest concentration of nutrients and organic matter. The topsoil removed from the Fiona Stanley Hospital site contains seed which has started to germinate when the topsoil is relocated to the rehabilitation areas – providing an excellent source of revegetation, particularly of native species.

Onsite landscaping and streetscaping

Future landscaping on the Fiona Stanley Hospital site will include:

- **greenways and open space** – these areas will, with the exception of some small sections of lawn for passive recreation use, be entirely planted with native plants. The greenways will also include pockets of densely planted trees and shrubs which will link and enhance the function of the retained bushland areas on the site;
- **streetscapes** – the major roads through the site will be lined with native trees, such as Banksia, Marri and Tuart; and
- **other areas of open space** – including urban plazas, internal gardens and roof gardens, which will be a mixture of native and exotic plantings (about 70 per cent native species).

Nesting boxes

The Fiona Stanley Hospital environment team is investigating the use of nesting boxes for local birds, in particular the Carnaby's Black Cockatoo.

Dieback management

Dieback is a plant disease caused by a microscopic 'water mould' which survives on the root and stems of living plants. It can be spread through the movement of contaminated vegetation or soil, including the movement of soil on vehicles, equipment and footwear. Dieback destroys vegetation and, ultimately, native fauna through a reduction in food and habitat.

A dieback affected area was identified in the south west corner of the Fiona Stanley Hospital site in early

2008. This area has been set aside and fenced, and will eventually be cleared, with all soil and plant materials disposed of appropriately.

More generally, hygiene measures have been introduced on the site including clean on entry, wash down and checks after working in the dieback infected area, ensuring that dieback is not spread around the site or beyond.

Construction Environmental Management Plan

A Construction Environmental Management Plan has been developed to identify and manage environmental issues during construction of the Fiona Stanley Hospital. The plan covers a range of areas including dust, odour and air quality; traffic management; noise and vibration; waste management; fire prevention; water management; Aboriginal heritage; and other aspects that will be carefully managed throughout the construction period.