

Perth Bunbury Highway

Update and information session By Eddy Wajon 11.12.2008 Tuckey Room

Eddy is the Conservation Council - Sustainability Liaison Officer working with Southern Gateway Alliance on the Perth-Bunbury Highway.

Eddy told us that the sustainability goals that had been set have been difficult to achieve. He now sees his role as "to challenge" decisions and methods to achieve the best possible outcome. Jenny Cackle has come onto the Environmental team to continue to work. The road reserve allows for four lanes of traffic and a railway. The aim is to have the road open by May 2009.

An important focus of Eddy's work has been on retaining vegetation and reducing the "footprint" of the formation. Unfortunately most of the northern end of the clearing had already been done before he started with the project. In some areas negotiation has reduced the clearing from 100m to around 50m – for example at Lake Paganoni, McLarty Forest and Stock Road.

Rare orchids (common name – Hammer Orchid) have been found on several sites including the Paganoni area where the interchange was revised, the median reduced from 30m to 22m and the verge reduced from 20m. Some of the difficulty is that the road is raised and the batters extend proportionate to the height. Strategies include steeper batters, review of drainage profile, wire rope barriers and the use of shrubs to stabilize the banks. By these actions 26 of 40 "at risk" tuart trees and 5 ha of area were saved.

In the Lakes Road area "Hammer Orchids" were also found. The road was realigned and some of the orchids in the revised roadway were translocated by Botanic Gardens and Parks (previously known as King's Park) department. This is experimental work to determine what methods will be best, whether the plants will survive longer term and what special "co-factors" are necessary. So far some of the plants are growing and have flowered.

This Lakes Road intersection was considered for the main entry to Mandurah but has proven too difficult and the area west of Marlee Reserve is now being considered. PPG, the Conservation Council of WA and other stakeholders are watching developments and providing input.

Offsets (providing replacement land) are required for both "dryland" and "wetland areas". One suggestion is the Old Lake Clifton Townsite. Commonwealth requirements state offsets must be WEST of the alignment and preferably in large parcels, not small blocks. It is suggested that the sand pit area adjacent to Anstey Wetland be made into a manmade wetland with areas of permanent water, seasonally inundated areas and settlement ponds draining into the Serpentine River.

The Project has to find a solutions to the excess nutrients (most particularly phosphorus) in the waterways and drains. The use of bauxite residue (both fine "red mud" and the coarser "red sand") is being reviewed to determine whether the safety fears are founded in fact. Delay in review results has prevented use of this product. A wetland will need to be constructed at Herron Point Road and may be a suitable site for this product if results are favourable.

Recycled Crushed Concrete is a sustainably viable product but road engineers are reluctant to use this product although it is cheaper, requires less crushing, requires less transport, conserves natural granite, reduces landfill and has been proven suitable in the eastern states and overseas. Some of the difficulty is in the suppliers finding the requirements to make them "code compliant" (acceptable to use), whilst achievable and not economical for small trial areas.

Eddy says he is "very impressed" with revegetation (he has had prior experience on Roe Highway and the Perth-Mandurah Rail Project) with a limited budget. \$11million has been allocated for work estimated to cost \$18m. Amounts of some of the more expensive seeds eg Dryanda species, has had to be reduced. Trials with different combinations of topsoil, mulch and compost are being conducted to determine what methods maximise germination rates. Verge plants need to be low-growing (less than 100mm) for safety reasons). We need good seasonal conditions and follow-up weed control.

Sustainability issues include protection of fauna. Both species of Black cockatoos has found along the alignment (especially the southern end) and have been impacted by the unavoidable loss of some

habitat trees. Large plastic "Cocka-tubes" have been fixed into substitute trees but are difficult to monitor for occupation and are, of necessity very high up! These tubes are made by Serpentine-Jarrahdale Landcare group.

Ringtail possums and other larger fauna need ways to get safely across busy roads. More research is needed to discover what type of underpass is most suitable. There is one at McLarty Forest, one at Harvey River, two at Lake Paganoni. The underpass at McLarty Forest has skylights and is open to the light at the median strip

It is interesting to note that Pardalotes have nested in cavities in the concrete of the Bridge sections at the Murray River. They usually nest much closer to the ground, so this may be an opportunity to provide artificial nests for them.

The project had intended to use recycled bio-diesel but this was unable to be delivered on site in bulk as the regular diesel, making a trip to the service station necessary. Nor was there any guarantee how the bio-diesel was produced (was it recycled oil, or palm oil?). In Eddy's words "It all became too hard".