

## THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION		
Recovery Team name	'Sedgelands in Holocene dune swales Recovery Team'	
Reporting Period (Calendar Year)	Calendar year 2008	

## **Current membership**

Member		Representing
1. Chair	Ms Val English	DEC
2. EXEC OFFICER		
3.	Dr Neil Gibson	DEC Science Division
4	Professor Phillip Jennings	Wetlands Conservation Society
5.	Ms Renee Evans	DEC Regional Parks
6	Mr James Henson	City of Rockingham
7	Mr Tim Fisher	DEC Regional Parks

Dates meetings were held

12 June 2008

## One to two paragraph summary of achievements suitable for *WATSNU*

## Summary

Members of the Recovery Team for the 'sedgelands in Holocene dune swales' dealt with a series of issues in 2008 including negotiations and advice about areas that contain the sedgeland community and are the subject of proposals for reservation or development. In particular, members of the Recovery Team were involved in negotiations to minimise impacts with regard to development, or in seeking to improve management of land at Secret Harbour, Lake Cooloongup, Bakewell Drive Port Kennedy, Port Kennedy Scientific Park, Lark Hill, IP14, and Port Kennedy Golf Course Stage 2.

Under the direction of DEC's Community and Regional Parks Branch, Euphorbia terracina control was continued in two large occurrences of the sedgelands community within Port Kennedy Scientific Park. Control of Trachyandra divaricata was also conducted in one of the sedgeland occurrences within Port Kennedy Scientific Park. Juncus acutus, Cortaderia selloana and Gomphocarpus fruticosus control was continued in Lake Walyungup and Lake Cooloongup Parks.

	Community and Regional Parks Branch worked in liaison with Mirvac Pty Ltd, the City of Rockingham and the Western Australian Police with regard to managing vehicle access at Port Kennedy Scientific Park. The branch has also installed fencing around the two younger swales closest to Becher Point to minimise disturbance to these areas.  Swan Coastal District continued liaison with Landcorp with regard to progressing the permanent closure of Lodge Road at IP14 to protect the sedgeland occurrences within this site.  Species and Communities Branch investigated possible additional occurrences of the community in Rockingham Lakes Regional Parks (Lake Cooloongup and Paganoni Swamp).
List of actions undertaken by Recovery Team (from actions in Recovery Plan)	
KEY ACTIONS	
Action 1	3.2 Identify all occurrences of the community  Possible additional occurrences of the community in Rockingham Lakes Regional Park (Lake Cooloongup and Paganoni Swamp) were investigated by DEC's Species and Communities Branch. The plant communities located were found to be similar in nature to the 'sedgelands in Holocene dune swales', but appeared transitional between the sedgeland community and a similar floristic community type that is not listed as threatened. This reflected the transitional nature of the underlying soils and landforms.
Action 2	In 2008, the Recovery Team continued to liaise with numerous groups including local government, industry and the local community to implement the recommendations in the Recovery Plan. In particular, members of the team were involved in negotiations to minimise impacts with regard to development of land, or in seeking to improve management of land at Secret Harbour, Lake Cooloongup, Bakewell Drive Port Kennedy, Port Kennedy Scientific Park, Lark Hill, IP14, and Port Kennedy Golf Course Stage 2.  Liaison between Species and Communities Branch and Landcorp resulted in agreement that Landcorp would fix fences, replace gates, install new gates as appropriate, and remove rubbish at the Bakewell Drive site. This work will help prevent further rubbish dumping, illegal fires and general disturbance to vegetation.  A site visit to Lake Richmond involving Swan Coastal District staff and Naragebup Environment Centre's Natural Resource Management Officer was undertaken in November 2008 to determine the recovery works required. The focus in 2009 will be

on implementing weed control for the sedgelands community which will also benefit the Lake Richmond microbial TEC. Swan Coastal District continued liaison with Landcorp in regards to progressing the permanent closure of Lodge Road at IP14 to protect the sedgeland occurrences within this site. There were discussions between Species and Communities Branch, City of Rockingham, and Department of Water (DoW) about water quality issues at Lark Hill. DoW and the City of Rockingham were able to provide information that indicated it is unlikely that the City's bores or sprinklers are impacting either water quality or levels at Lark Hill, and that nutrient contamination is likely to be from another source. DoW noted that it is only possible to amend current bore licence conditions with the support of the relevant licence holder, however, these conditions can be changed when bore licences are renewed. Action 3 3.4 Minimise further clearing of the community Members of the Recovery Team provided advice and recommendations with regard to development of a road on the edge of Rockingham Lakes Regional Park (Lake Cooloongup), and other areas proposed for development. Action 4 3.5 Minimise recreational disturbance to the community Liaison between Species and Communities Branch and Landcorp resulted in agreement that Landcorp would fix fences, replace gates, install new gates as appropriate and remove rubbish at the Bakewell Drive site. This will help prevent further rubbish dumping, illegal fires and general disturbance to vegetation. Community and Regional Parks Branch worked in liaison with Mirvac Pty Ltd, the City of Rockingham and the Western Australian Police with regard to managing vehicle access at Port Kennedy Scientific Park. Community and Regional Parks Branch has countered the unauthorised vehicle access into the park through weekly site inspection, and repairing the feral-proof fence as soon as damage is noted. A maintenance contract for vermin proof fencing has been awarded that will reduce response time for repairs. Responses to unauthorised access were also countered through a multi-agency enforcement effort in December 2008. DEC Regional Parks staff will also shortly undergo a Law Enforcement course, seeking to increase staff understanding and implementation of the Conservation and Land Management Act 1984. Community and Regional Parks branch have installed fencing around the two younger swales closest to Becher Point in order to minimise disturbance to these areas. Action 5 3.8 Apply fire response plans Port Kennedy Scientific Park falls within unexploded ordnance

	(UXO) zones 1 – 4. Ground and air assets are now available to use in this area, including areas outside of defined tracks.	
	The fire that went through a portion of the IP14 site in 2008 was mapped by DEC's Swan Coastal District.	
Action 6	3.9 Design and implement a weed control strategy for the community	
	Consistent with the Weed Control and Rehabilitation Plan for Rockingham Lakes Regional Park, DEC's Community and Regional Parks Branch continued <i>Euphorbia terracina</i> (Geraldton carnation weed) control in two large occurrences of the sedgeland community within Port Kennedy Scientific Park. Control of <i>Trachyandra divaricata</i> (dune onion weed) was also conducted in one of the sedgeland occurances within Port Kennedy Scientific Park. <i>Juncus acutus</i> (sharp rush), <i>Cortaderia selloana</i> (pampas grass) <i>and Gomphocarpus fruticosus</i> (cotton bush) control was continued in Lake Walyungup and Lake Cooloongup Parks, with work in 2008 building on weed control completed in 2007.	
	\$1.15 Million has been budgeted in the Kennedy Bay Conservation and Recreation Enhancement Plan to become available through the Port Kennedy Golf Course Stage 2 for weed control and rehabilitation in Port Kennedy Scientific Park.	
Action 7	3.11 Report on success of management strategies for wetlands	
	This report completes this action for 2008.	
Action 8	3.26 Negotiate for appropriate management of other occurrences in Port Kennedy, outside Port Kennedy Scientific Park	
	Members of the Recovery Team provided advice and recommendations with regard to possible reservation of areas of the community in IP14 and Bakewell Drive, and on avoiding damage to possible new occurrences in Lake Cooloongup. Negotiations are continuing. Members of the team also provided comment on issues relating to minimising hydrological and other impacts at the Port Kennedy Golf Course Stage 2 and at Lark Hill.	
Criteria for success or failure as described in Recovery Plans or Interim Recovery Plans	ASSESSMENT OF PROGRESS TOWARDS MEETING CRITERIA FOR SUCCESS AS DESCRIBED IN RECOVERY PLAN	
	Criteria for success in Interim Recovery Plan:	
	An increase in the area, number of occurrences, and completeness of a geomorphic age sequence of this community under conservation management.	

Ongoing - see above: members of the Recovery Team are involved with ongoing negotiations and provision of advice about areas that contain the sedgeland community and are the subject of proposals for reservation. Liaison with Landcorp and other relevant land managers was undertaken in 2008 to specifically seek to improve on-ground management of occurrences.

 Maintenance in terms of diversity and basic composition of native species (as described in Gibson et al. 1994).

Ongoing - see above: baseline data on condition have been collected for the sedgeland community in Port Kennedy Scientific Park, and permanent monitoring plots have been established in occurrences at Bakewell Drive Port Kennedy, Lake Cooloongup, IP14, Golden Bay, Port Kennedy Scientific Park and Anstey Swamp. The data will also be added to and compared with the original dataset held in the Gibson *et al.* (1994) report 'A floristic survey of the southern Swan Coastal Plain'.

Control of *Euphorbia terracina* and *Trachyandra divaricata* was continued in Port Kennedy Scientific Park and control of *Juncus acutus*, *Cortaderia selloana* and *Gomphocarpus fruticosus* was continued in Lake Walyungup and Lake Cooloongup Parks.

Work on infrastructure and activities to control impacts of illegal access at Port Kennedy Scientific Park was continued in 2008.

 Maintenance of water levels and quality in the wetlands that contain the community.

Ongoing: Species and Communities Branch, City of Rockingham, and Department of Water (DoW) discussed water quality issues at Lark Hill. Bore licence conditions may be able to be changed when relevant bore licences are renewed.

Hydrological data are continually being collected for areas that contain occurrences of the community. Detailed data are being collected for areas adjacent to development areas including Waikiki Station, Lark Hill, Port Kennedy Golf Course Stage 2, Anstey Q wetland, and other specific sites in within Rockingham Lakes Regional Park. Long terms trends are yet to be determined.

 Maintenance or improvement in the condition and extent of the community including reduction of exotic species

Ongoing - see above: Weed control was continued in 2008 in Port Kennedy, Lake Walyungup and Lake Cooloongup Parks, and the collection of data on weed levels was continued.