

NOT ENTERED ON GIS

Name: Whicher – Possible Burns (and other documents)

Date: 11/05/2006

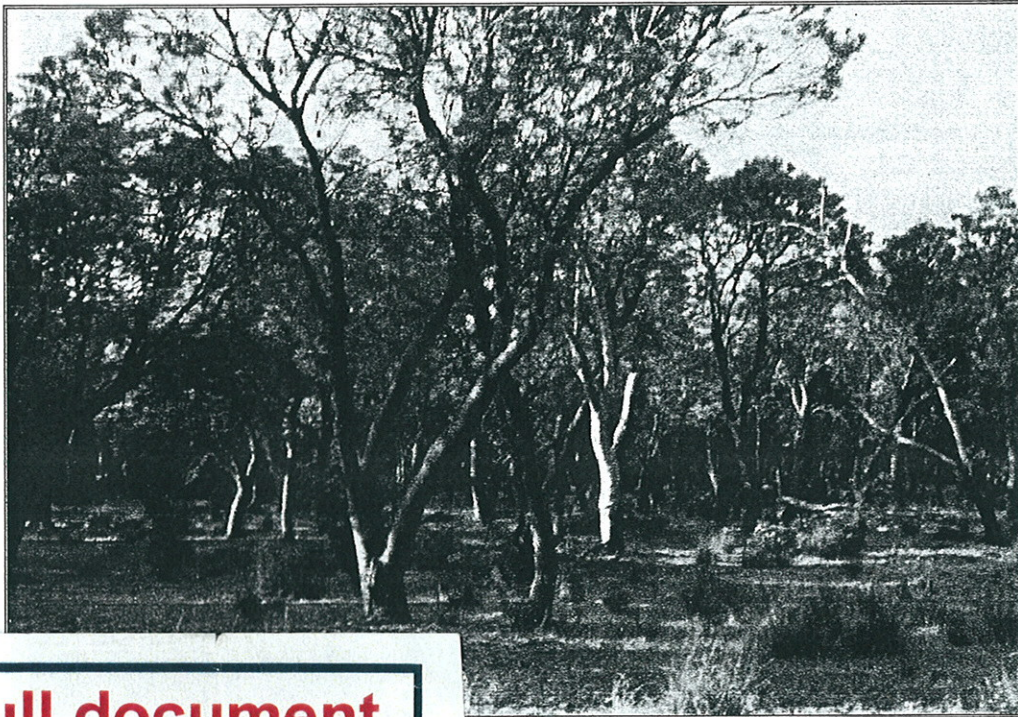
Comments: Document contains no information beneficial/suitable for the BSI

For full report see
'Busselton Files'
Geographe Bay.

Remnant Vegetation Strategy

for the

Geographe Bay Catchment



**Full document
available
on request**


Natural Heritage Trust
Helping Communities Helping Australia



Shire of Busselton

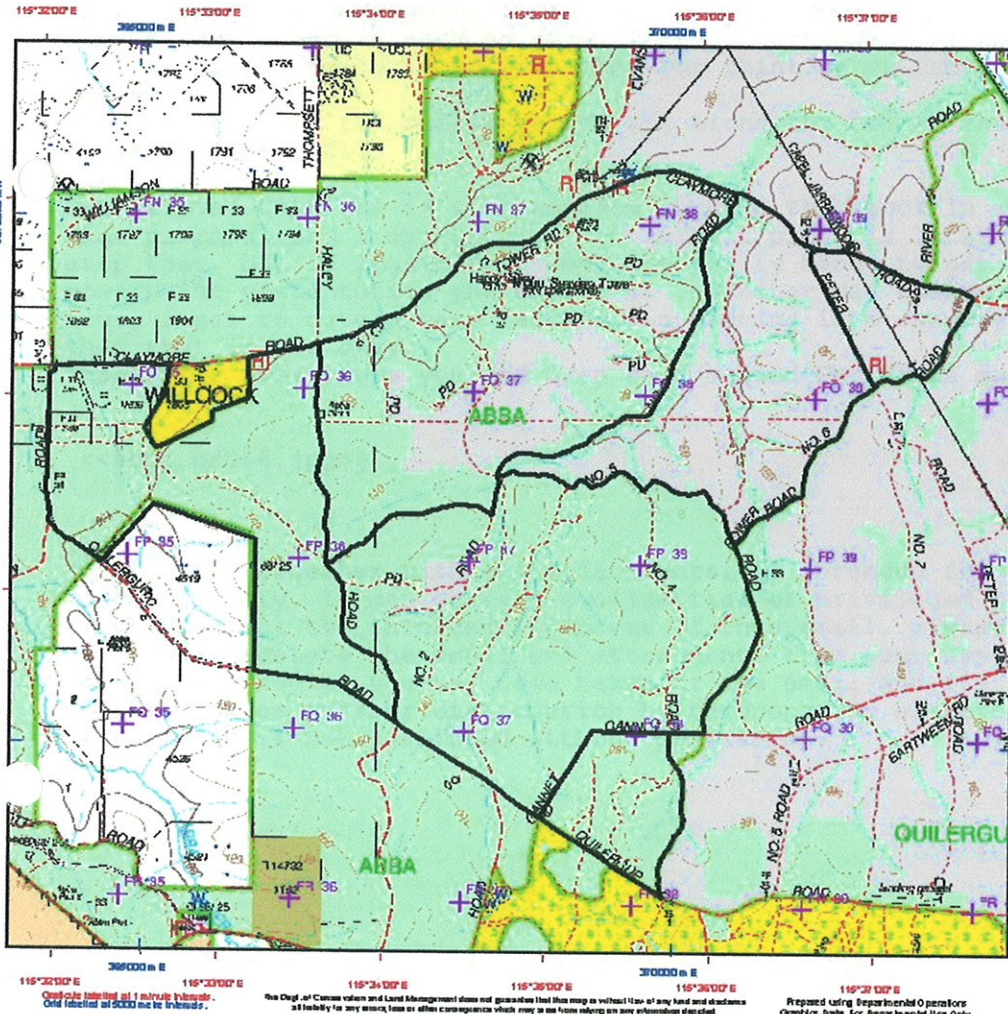


Land Conservation
District Committees



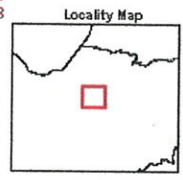
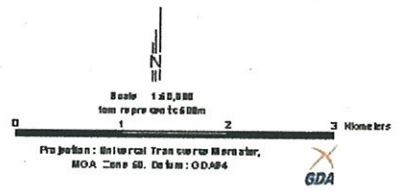
GeoCatch

Whicher - possible Burns



05 Spring Burn Program
Abba BS 066

Legend
Blkwk_sp05_300904.shp



DEPARTMENT OF Conservation
Produced by Colin Prosser
Under the Direction of
Neilson McInnes Executive Director
Department of Conservation & Land Management.

Produced at 16:26 on December 17, 2004

Whicher Scarp Files.

KEIGHERY Bronwen

From: Webb, Andrew [andrewwe@calm.wa.gov.au]
Sent: Friday, 17 December 2004 4:48 PM
To: KEIGHERY Bronwen
Subject: Whicher scarp



abba bs066.jpg

Bronwen,

In regards to the upcoming flora surveys that look like may be getting undertaken in the Whicher Scarp, i need to know if the attached map of a proposed burn for Spring 2005 is likely to be in an area that you think we or Cable Sand should be using for the survey.

To orientate you the darker yellow bit along the top of the picture (north) is the Thompsett road UCL.

Our beloved CALMFire is also wanting to burn the block in which the whole Gwindinup mine proposal and a majority of the current plots is located.. i think i'll be able to stop that, but if possible it would be really handy to get hold of a copy of that powerpoint presentation you showed us the other day when you were down for the EPA tour, i got to have a case ready for a meeting late January and i thought i'd show them that if its okay..

Thanks for this, hope you and Greg have a good Christmas and New Year

<<abba bs066.jpg>>

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SHRUBLAND ASSOCIATION ON
SOUTHERN SWAN COASTAL PLAIN
IRONSTONE (BUSSELTON AREA)
INTERIM RECOVERY PLAN No. 44

Summary of recovery actions



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Action 1 - Establish recovery team

- Team formed in 1996
- Met regularly but not recently

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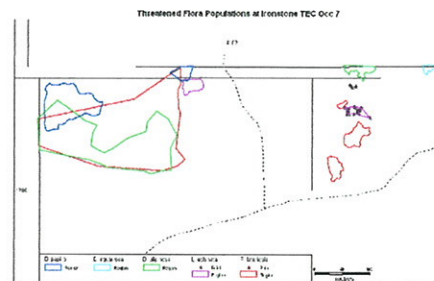
Action 2 – Liaison with landholders, management bodies and managers

- Ongoing liaison with:
 - Shire
 - Iluka
 - Cable Sands
 - Wonnerup-Tutunup Rail Reserve Group
 - Westrail
 - Private property owners

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Action 3 – Monitor the extent and boundaries of occurrences

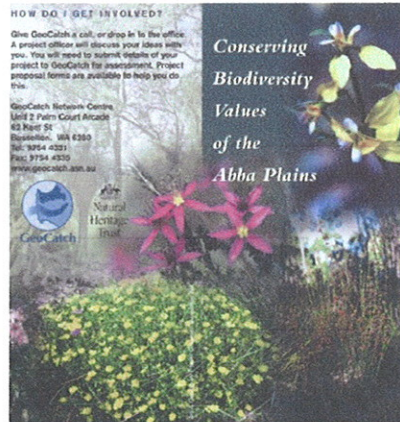
- Previously manually mapped or using aerial photography
- Completed at Wonnerup-Tutunup Rd
- Others in progress



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Action 4 – Disseminate information about the community

- 'Have you seen ...' brochures distributed
- 'Abba Plains' brochure with GeoCatch (2002)
- DRF drink holders, coasters and stickers
- Local shows, local groups, newsletters, CALM staff



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Action 5 – Install markers to indicate the locations of occurrences of the community alongside tracks, firebreaks and roads

- DRF markers installed at Oates Road, Williamson Road, Kolhagen Road, Jacka Road, Smith Road
- Western Power markers at Negus
- Wonnerup-Tutunup Road 'Flora Road' signs



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Action 6 – Design and implement a program for monitoring flora

- Translocation monitoring at Oates and Negus
- Plant health monitoring (Phosphite treatments) at Smith Road, Williamson Road
- DRF rare flora report forms
- Proposed to re-establish Gibson plots



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Action 7 – Monitor dieback

- Plant health (see previous)
- Difficult to monitor dieback edge
- Samples at various sites

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Action 8 – Implement dieback treatment

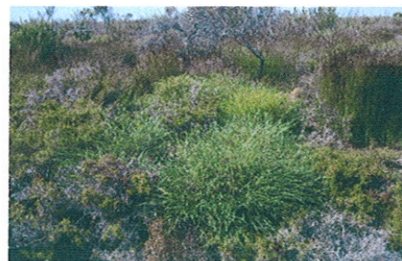
- Phosphite treatment at:
 - Wonnerup-Tutunup Rd, incl. Negus
 - Williamson Road
 - Smith Road
 - Jacka Road
 - Kolhagen Road
 - Gale Road



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Action 9 – Monitor recovery of *Dryandra* from *Armillaria luteobubalina*

- Deaths of *Dryandra nivea* ssp. *uliginosa* have been monitored



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Action 10 – Ensure hygiene conditions

- Appropriate hygiene practices in place
- Blocked western boundary of Williamson Road
- Signage 'Clean vehicles at Negus'
- Temporary fencing at Wonnerup-Tutunup Rd
- Fencing at Jacka Road



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Action 11 – Develop and implement a fire management strategy

- Fire history obtained
- Fire response plans developed
- Firebreaks maintained at Negus, Gale Road, Oates Road, Williamson Road
- Internal communication and information exchange



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Action 12 – Monitor salinity and groundwater levels, and depth and timing of inundation in the community

- Inundation records
- Monthly ground water monitoring at Williamson Road, Oates Road
- Piezometers at Wonnerup-Tutunup Rd and Smith Road
- Other bores not monitored



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Action 13 – Monitor weeds

- Monitoring as part of flora monitoring program
- Extent of weeds widespread



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Action 14 – Implement weed control

- Watsonia control carried out at Wonnerup-Tutunup Rd.
- Penny Royal treatment at Negus.
- Grass and kikyu control carried out at Negus
- Slash and herbicide treatment at Oates
- Guildford grass control trialled at Negus and Oates.
- Pines at Willcock



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Action 15 – Develop strategy for ex-situ propagation

- Translocation at Oates, Negus, Williamson Road and Smith Road
- Direct seeding trials at Oates
- Seedlings raised at KPBG from buds and cuttings



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Action 16 -Design and conduct research

- UWA/KPBG research on physiological restraints of being adapted to a highly restricted environment

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Action 17 – Report on management strategies

- Annual report
- Annual WATSCU presentation
- South West Region Threatened Flora and Ecological Communities Recovery Team
- OPP

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MANAGEMENT ACTIONS 18 & 19 SPECIFIC FOR SECTIONS OF OCCURRENCES 1-5 ON PUBLIC LANDS

Action 18 – Transfer care, control and management of road and rail reserve to NPNCA

- Rail reserve transferred to Shire and managed by Wonnerup-Tutunup Rail Reserve Group



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Action 19 – Develop a management plan for the community on the road and rail reserve

- Fire management plan developed by local group and CALM in 1998
- New management plan currently being developed

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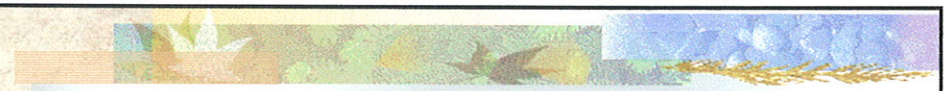


MANAGEMENT ACTIONS 20-22
SPECIFIC FOR SECTIONS OF
OCCURRENCES 1, 2 & 10

Action 20 – Fence occurrences where appropriate

- Fencing at Negus, Oates, Williamson Road, Gale Road and Jacka Road

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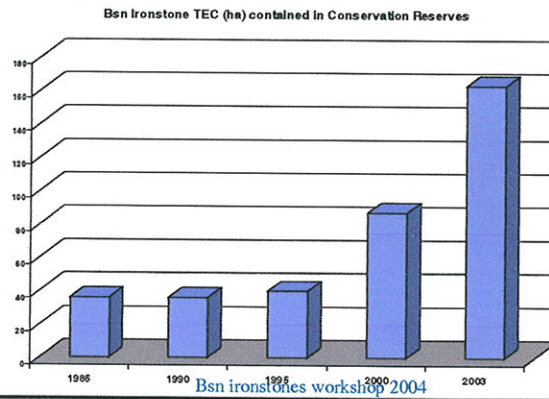
Action 21 – Encourage and assist landowners to access available incentives and mechanisms for conserving the ironstone community

- ‘Abba Plains’ biodiversity partnership project with GeoCatch and Shire
- ‘Busselton-Augusta Biodiversity Hotspot’ partnership project with GeoCatch
- Support to Taylor for subdivision through Shire of Busselton Biodiversity Strategy

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Action 22 – Seek to acquire occurrences if the community is not being successfully managed for conservation, or if they become available

- Purchased Oates (1997 and 2003), Negus (1999) and Taylor's (2004) properties



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Broadscale Application

Development of large scale
reconstruction of Busselton Ironstone
Communities

OATES 2 : OBJECTIVE

Encourage large scale recruitment of endemic
plant species by:

- Planting of seedlings and
Advanced potted stock
- Broadcasting of seed
- Recruitment from existing
populations
- Weed control
- Hydrology Considerations
- Recognise soil types and
stone depth



DEVELOPMENT

- Gravel Quadrats
- Brushings
 - On Gravel
 - Control
 - Burnt
- Use of Existing Structures



Why the Gravel Quadrats?

- To replicate the current recruitment of *Grevillea maccutcheonii* on Oates Rd
- Work with hydrology pattern
- Reduce/restrict weed competition



Comparison with Control



20th November 2004

Some Results To Date:

Lambertia echinata
subsp. occidentalis



20th July 2004

Some Results To Date: Brushings- *Regelia ciliata*



Some observations / results To Date

- Certain species have had a better germination result from brushings then seeds
 - *Melaleuca incana*
 - *Regalia ciliata*
 - *Hakea oldfieldii*
- *Lambertia echinata* subsp. *occidentalis* seed germination was very high
- Weed seed is to aggressive and inhibits germination of target species
- Hydrology pattern did not affect some species as much as others
 - Successful with wet feet
 - *Melaleuca incana*, *Melaleuca. priessiana*
 - Struggled but still going
 - *Viminaria juncea*
 - Died
 - *L. echinata subsp. occidentalis*
 - *Petrophile latericola*

Some Expectations/Predictions

Short Term

- Natural thinning as the weather warms up and the seedling root systems hit the ironstone (aiming for at least 5% retention/success)
- Gradual invasion of wind borne weed seed

Long Term

- Natural spacing occurring as plants develop
- Recruitment of surrounding areas (Particular to stage 2)
- Resource commitment dropping while still keeping viable populations

The Future

Second stage development

- Mosaic Pattern
- Miniature of current quadrats
- Small mounds
- Set spacing
 - Easier weed control
 - Promote recruitment within the spaces
- Lower resource commitment



The Future Hydromulch

- Still in concept development stage
- Mine site rehabilitation currently use this with mixed results
- Can add seed into the process
- Relatively cheap compared to other processes (Under \$1/m²)
- No chemicals added to the environment
- Will develop 2 small 50m x 50m trial plots
 - 1x standard use with seedlings planted
 - 1x added seed mix



The Final BIG Questions

Should we be doing this at all ?

IF yes:

How do we measure viability ?

IF we can:

How do we set priorities / resources in regards to other ironstone communities ?



Grevillea maccutcheonii