From: Williams, Kim [Kim.Williams@dec.wa.gov.au]

Sent: Monday, 5 November 2012 9:29 AM

To: Stemp, Rory

Cc: sue.brand@naturalarea.com.au; Des Ferris; Clarke, Kate; Caesar D'Adamo; SWRegion, Admin

Subject: RE: Revegetation plan for DEC comment

Rory and Sue,

Below are DEC South West Region comments pertaining to;

1) draft revegetation management plan for the Tuart Forest offset site,

2) Busselton Health Campus conservation area revegetation plan.

Specific comments are provided for each section of where required.

Comment has not been provided for those sections where the content, intent or committment is acceptable to DEC.

1) Tuart Forest Revegetation Management Plan (Oct 2012)

5.2 Vegetation health

- needs to consider Armilleria is the likely cause of tree deaths (in the photos) and identify mechanisms to minimise the potential impacts on the revegetation area. ie: decaying tree stumps can act as a reseviour of mycelium for the fungi, removal of the stumps (ripping), heaping and burning will reduce the quantity of fungi resource in the immediate area and provide the reaw materials for the creation of ashbeds in which to plant and seed the revegetation species.

5.3 Revegetation methodology

- separate species lists for the Tuart forest and wetland transition area need to be developed
- include ripping to create a deep rip line (`40cm deep) every second line using a winged tyne allowing seedlings to be planted into the bottom of the rip line, this creates a micro-climate that increases the moisture that is available to the seedlings
- need to consider how post planting weed control will be implemented advantageous to construct spray lines to allow post planting spraying of rehab, width depends on method of application
- list fertilizer type and methodology of application

5.3.1 Tubestock

- overstorey species should be planted at 1 per 10m², giving a total stocking rate of 4,000 seedlings/ha, current stocking is 3,500 seedlings/ha, increased rates allow for better weed suppression and allows for deaths that will occur at this site

5.3.2 Revegetation - Tuarts

- any stumps on site are to be ripped out and with any ground timber, heaped and burnt prior to final seeding and planting

5.3.3 Revegetation - seed

- using knowledge gained from recent DEC rehab works elsewhere in the Tuart Forest direct seeding additional to planting should occur at the rate of 2kg/ha, increased rates allow for better weed suppression and allows for deaths that will occur at this site
- method of direct seeding needs to be described

5.3.4 fencing

- suggest 10 line Ringlock with 1.8m steel posts at 8m intervals is adequate to reduce the impacts of kangaroos.
- pine strainer assemblies and pine uprights should be replaced by engineered galvanised metal assemblies (eg:Warratah or Cyclone Brand) to maintain fence integrity in the event of a fire through the site..
- "lightweight kangaroo swing gates" should be installed at each corner in a fence design/structure that encourages kangaroos to use the gates
- gates should be on diagonally opposite corners in the SW and NE corners
- access gates are to be of a design to permit easy emergency vehicle access and securely fixed to reduce potential for theft.
- gates to have integrated chain to facilitate locking using DEC padlock.

5.4 Completion Criteria

- to what time frame will the 75% survival criteria be applied ? elaborate.
- principle goal is the establishment of WRP habitat to compensate for the habitat loss at the hospital site how will acheivement of this goal be assessed?

6.1 Weed control

- there is a significant weed burden on this site

- to maximise rehab survival success weed control should be undertaken at least two years prior to seeding and planting

- weed control should be undertaken twice in each year prior to seeding and planting

- site should be scarified at -2 and -1 year to encourage germination of weeds prior to controlling

- no residual herbicide should be used the year before seeding and planting

- provide detail on how post-planting weed control will be undertaken - methods, chemicals and rates.

7.1.1 Rabbit control

- 1080 baiting should occur on and around the rehab site twice pre and annually after seeding and planting

- rabbit burrows should be destroyed (ripped) to prevent reuse.

2) Busselton Health Campus conservation area revegetation plan.

The Revegetation Management Plan aligns with the final version (7th) of the Western Ringtail Possum Management Plan and the fire management plan. The two new reports from Natural Area Consulting were thorough in their detail of how the revegetation will be implemented, monitored and evaluated

5.3.5 Watering Unit

- the frequency of watering is unclear, as the plan states that watering will occur from December through to March (although on the schedule on page 61, watering only occurs until February) but does not state how many times will it occur ie. once per month or per week please clarify

Also, if the plants appear to be suffering drought stress during the summer or any other time, will they only be observed during the bi-annual monitoring or at other times? What contingency plans will be in place to water outside the stated schedule?

5.3.2 Infill Planting

The understorey revegetation is proposed for only specific areas with even few areas of mulching proposed – is this small amount of understorey revegetation proposed to reduce the fire risk? Understorey vegetation rehabilitation for the south-west portion of the conservation area would improve the value of this area

Regards

Kim

Kim Williams Regional Leader Nature Conservation **Dept Environment and Conservation** South West Region - Bunbury

Ph: 97254300

Email: Kim.Williams@dec.wa.gov.au

From: Stemp, Rory [mailto:Rory.Stemp@health.wa.gov.au]

Sent: Thursday, 4 October 2012 3:50 PM

To: Williams, Kim

Cc: sue.brand@naturalarea.com.au; Des Ferris; Clarke, Kate; Caesar D'Adamo

Subject: Revegetation plan for DEC comment

Kim - I have attached a draft version of the Busselton Health Campus conservation area revegetation plan.

Please review and provide your comments as soon as possible. We need to have this approved by the DSEWPaC by 20 December and I suspect that there will be a number of rounds of discussions with them prior to approval.

Monday, Wednesday and Friday next week are good for me to discuss invoicing / students etc. in regard to the WRP relocation. Please give me a call or let me know if you want to meet face to face.

Thanks, Rory

RORY STEMP Project Coordinator (Busselton Health Campus Redevelopment)

Phone: (08) 974 Fax: (08) 97540544 Mobile: 042 18 West Street, Busselton, WA 6280

Working together for a healthler country WA Our Values: Community | Compassion | Quality | Integrity | Justice

Please consider the environment before printing this email.

This email, together with any attachments, is intended for the addressee only. It may contain confidential or privileged information. If you are not the intended recipient of this email, please notify the sender, delete the email and attachments from your system and destroy any copies you may have taken of the email and its attachments. Duplication or further distribution by hardcopy, by electronic means or verbally is not permitted without permission.