Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6361/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: APA Operations Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 38/105
Miscellaneous Licence 39/225
Miscellaneous Licence 39/226
Miscellaneous Licence 39/227
Miscellaneous Licence 39/228
Miscellaneous Licence 39/229
Miscellaneous Licence 39/233
Miscellaneous Licence 39/234

Local Government Area: Shire of Laverton and Shire of Menzies

Colloquial name: Eastern Goldfields Pipeline

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1,000		Mechanical Removal	Pipeline Construction and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 29 January 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Six Beard vegetation associations have been mapped within the application area (GIS Database):

18: Low woodland; mulga (*Acacia aneura*);

19: Low woodland; mulga between sandridges;

39: Shrublands; mulga scrub;

84: Hummock grasslands, open low tree & mallee steppe; marble gum & mallee (*Eucalyptus youngiana*) over hard spinifex *Triodia basedowii* between sandhills;

389: Succulent steppe with open low woodland; mulga over saltbush; and

1239: Hummock grasslands, open medium tree & mallee steppe; marble gum & mallee (*E. youngiana*) over hard spinifex *Triodia basedowii* on sandplain.

A level 1 flora survey was conducted over the length of the application area. The application area was surveyed in two stages; Murrin Murrin to Sunrise Dam Gold Mine and Sunrise Dam Gold Mine to Tropicana Gold Mine. The Murrin Murrin to Sunrise Dam section was undertaken from 28 to 30 October 2013 and the Sunrise Dam to Tropicana section from 30 October to 5 November 2013 (Botanica Consulting, 2014a; 2014b). The following vegetation communities have been identified within the application area:

Murrin Murrin to Sunrise Dam Gold Mine

CLP-AFW1: Low Forest of *Acacia caesaneura* and *Acacia quadrimarginea* over *Senna artemisioides* subsp. *helmsii, Acacia tetragonophylla, Acacia burkittii, Eremophila margarethae, Ptilotus obovatus, Solanum lasiophyllum* and *Maireana triptera* in clay-loam soils;

CLP-AFW2: Low Forest of *Acacia caesaneura* over *Atriplex bunburyana* and *Aristida contorta* in clay-loam soils;

CLP-AFW3: Low Forest of *Acacia incurvaneura* over *Acacia ramulosa* var. *ramulosa, Eremophila latrobei* subsp. *glabra, Senna artemisioides* subsp. *artemisioides, Eremophila jucunda* and *Eremophila forresti* subsp. *forrestii* in clay-loam soils;

CLP-AFW4: Low Woodland of *Acacia aptaneura* and *Acacia caesaneura* over *Acacia victoriae, Grevillea berryana, Grevillea reflexa, Maireana sedifolia* and *Senna artemisioides* subsp. *filifolia* in clay-loam soils;

CLP-AFW5: Low Woodland of *Acacia aptaneura* over *Hakea preissii, Acacia colletioides, Atriplex bunburyana* and *Maireana pyramidata* in clay-loam soils;

CLP-AOW1: Open Low Woodland of *Acacia aptaneura* over *Eremophila pantonii, Atriplex bunburyana, Cratystylis subspinescens* and *Maireana pyramidata* in clay-loam soils;

CLP-AOW2: Open Low Woodland of *Acacia incurvaneura* and *Hakea preissii* over *Eremophila pantonii, Maireana pyramidata, Maireana sedifolia, Maireana glomerifolia* and *Maireana triptera* in clay-loam soils;

CLP-AOW3: Open Woodland of *Acacia caesaneura, Acacia macraneura* and *Acacia ayersiana* over *Acacia ramulosa* var. *ramulosa, Eremophila forrestii* subsp. *forrestii, Eremophila margarethae* and *Maireana triptera* in clay-loam soils;

CLP-AOW4: Open Woodland of *Acacia caesaneura, Acacia macraneura* and *Acacia ayersiana* over *Acacia ramulosa* var. *ramulosa, Eremophila forrestii* subsp. *forrestii, Eremophila margarethae, Maireana triptera* and *Eragrostis laniflora* in red loam;

CLP-CFW1: Low Woodland of *Casuarina pauper* over *Acacia victoriae, Exocarpos sparteus, Eremophila glabra* and *Tecticornia halocnemoides* in brown loam soils;

CLP-CSSSF1: Shrubland of Chenopod species with occasional emergent *Acacia ayersiana* and *Acacia caesaneura* over *Acacia kalgoorliensis* and *Hakea preissii* in clay-loam soils;

CLP-OS1: Shrubland of *Hakea preissii, Acacia tysonii, Eremophila miniata, Pimelea microcephala* subsp. *microcephala, Exocarpos aphyllus* and *Pittosporum angustifolium* over *Atriplex vesicaria, Maireana aphylla, Rhagodia drummondii, Cratystylis subspinescens* and *Senna artemisioides* subsp. *filifolia* over *Aristida holathera* var. *holathera* and *Solanum orbiculatum* subsp. *orbiculatum* and low Chenopod species in clay-loam soils;

RP-AOW1: Open Low Woodland of *Acacia caesaneura* over *Eremophila pantonii, Ptilotus obovatus* and *Maireana triptera* in clay with quartz pebbles;

RP-AOW2: Open Woodland of *Acacia ayersiana* and *Acacia caesaneura* over *Eremophila margarethae* and *Acacia tetragonophylla* over Poaceae and Asteraceae spp. in clay with quartz and ironstone pebbles;

SLP-AFW1: Low Forest of *Acacia aptaneura, A. caesaneura* and *A. incurvaneura* over *Acacia tetragonophylla, Eremophila margarethae* and *Triodia basedowii* in sandy-loam soils;

SLP-AFW2: Low Woodland of *Acacia caesaneura* and *Acacia incurvaneura* over *Atriplex bunburyana*, *Scaevola spinescens, Acacia tetragonophylla, Hakea kippistiana* and *Aristida contorta* in sandy-loam soils;

SLP-AOW1: Open Low Woodland of *Acacia ayersiana* and *Acacia caesaneura* over *Grevillea berryana* and *Triodia basedowii* in sandy-loam soils;

SLP-AOW2: Open Low Woodland to Woodland of *Acacia caesaneura, Acacia ayersiana* over *Acacia ramulosa* var. *ramulosa*, *Acacia tetragonophylla, Eremophila latrobei* subsp. *latrobei, Eremophila* spp., *Maireana triptera*, *Solanum lasiophyllum, Ptilotus obovatus* and *Eragrostis eriopoda* in sandy-loam soils;

CD-CSSSF1: Low Scrub of *Cratystylis subspinescens* and *Atriplex bunburyana* over dwarf scrub of *Tecticornia calyptrata, Tecticornia halocnemoides, Tecticornia pergracilis, Tecticornia indica* subsp. *bidens* and *Tecticornia* sp. (unrecognised taxon, K. Shepherd) on claypan/lake shoreline;

OD-AOW1: Open Woodland of *Acacia caesaneura, Acacia macraneura* and *Acacia ayersiana* over *Acacia ramulosa* var. *ramulosa, Eremophila forrestii* subsp. *forrestii, Eremophila margarethae*, *Maireana triptera* and *Eragrostis laniflora* in drainage line;

OD-AOW2: Open Low Woodland of *Acacia aptaneura* and *Acacia incurvaneura* over *Acacia craspedocarpa, Acacia tetragonophylla, Eremophila margarethae, Atriplex bunburyana* and *Cratystylis subspinescens* in creekline;

R-AOW1: Open Woodland of *Acacia ayersiana* and *Acacia tysonii* over *Eremophila miniata, Cratystylis subspinescens, Hakea preissii, Atriplex vesicaria* and *Solanum lasiophyllum* over *Aristida contorta* in red loamy soils on ridges;

RS-AFW1: Low Forest of *Acacia incurvaneura, Acacia quadrimarginea* and *Acacia ramulosa* var. *ramulosa* over *Eremophila forrestii* subsp. *forrestii, Senna artemisioides* subsp. *helmsii* and *Ptilotus obovatus* on rocky slope;

RS-AFW2: Low woodland of *Acacia aptaneura* and *Acacia grasbyi* over *Acacia ramulosa* var. *ramulosa* and *Aristida contorta* on rocky rise;

RS-AFW3: Low Forest of *Acacia caesaneura* and *Acacia incurvaneura* over *Acacia ramulosa* var. *ramulosa, Dodonaea rigida, Senna artemisioides* subsp. *artemisioides, Senna artemisioides* subsp. *helmsii Senna cardiosperma* and *Ptilotus obovatus* on Banded Ironstone Hill;

DV: Disturbed Vegetation (excluding roads/access tracks);

B-CFW1 - Low Forest of *Casuarina pauper* over sparse scrub of *Dodonaea lobulata, Bossiaea walkeri* and *Westringia rigida* on breakaway outcrop;

B-MWS1 - Open Shrub Mallee of *Eucalyptus youngiana* over Low Woodland of *Acacia ayersiana* and *A. caesaneura* over moderately dense scrub of *Eremophila latrobei* subsp. *latrobei* and *Scaevola spinescens* on breakaway Outcrop;

CLP-AFW1 - Low Forest of *Acacia burkittii* over moderately dense scrub of *Dodonaea lobulata, Senna artemisioides* subsp. *filifolia* and *Ptilotus obovatus* in clay-loam soils;

CLP-AFW2 - Low Forest of *Acacia aptaneura, Acacia caesaneura* and *Acacia incurvaneura* over sparse scrub of *Senna artemisioides* subsp. *x artemisioides, Senna artemisioides* subsp. *filifolia, Ptilotus obovatus* and *Solanum lasiophyllum* in clay-loam soils;

CLP-AFW3 - Low Forest of *Acacia caesaneura* and *A. incurvaneura* over moderately dense soft grass of *Aristida contorta* in clay-loam soils;

CLP-AFW4 - Low Forest of *Acacia caesaneura* over sparse scrub of *Eremophila miniata, Cratystylis subspinescens* and *Rhagodia eremaea* over moderately dense soft annual grass of *Aristida holathera* in clay-loam soils;

CLP-AFW5 - Low Forest of *Acacia caesaneura* over sparse scrub of *Eremophila miniata, Cratystylis subspinescens* and *Rhagodia eremaea* over moderately dense *Triodia basedowii* in clay-loam soils;

CLP-AFW6 - Low Woodland of *Acacia caesaneura* and *Acacia incurvaneura* over moderately dense scrub of *Acacia burkittii, Acacia ligulata* and *Acacia kempeana* over *Dodonaea lobulata* and *Senna artemisioides* subsp. *filifolia* in clay-loam soils;

CLP-AFW7 - Low Woodland of *Acacia incurvaneura* over moderately dense scrub of *Dodonaea lobulata, Senna artemisioides* subsp. *filifolia, Ptilotus obovatus* and *Sida* sp. Excedentifolia (J.L. Egan 1925) in clay-loam soils;

CLP-AFW8 - Low Woodland of *Acacia caesaneura* over moderately dense *Dodonaea rigida, Eremophila latrobei* subsp. *latrobei* and *Scaevola spinescens* in clay-loam soils;

CLP-AFW9 - Low Woodland of *Acacia caesaneura/Casuarina pauper* over moderately dense scrub of *Eremophila scoparia, Dodonaea viscosa* subsp. *angustissima, Eremophila miniata* and *Cratystylis subspinescens* in clay-loam Soils;

CLP-AFW10 - Low Woodland of *Acacia caesaneura* and *Casuarina pauper* over sparse to moderately dense scrub of *Eremophila scoparia, Scaevola spinescens* and *Maireana triptera* in clay-loam soils;

CLP-AFW11 - Low Woodland of *Acacia caesaneura* over isolated shrubs over scattered to open *Triodia basedowii* and soft grasses in clay-loam soils;

CLP-AFW12 - Low Woodland of *Acacia caesaneura* over sparse to moderately dense *Aluta maisonneuvei* subsp. *auriculata/Acacia ramulosa* var. *ramulosa* and *Eremophila forrestii* subsp. *forrestii* over *Triodia basedowii* in sandy-loam soils;

CLP-AOW1 - Open Low Woodland of *Acacia ayersiana* and *Casuarina pauper* over moderately dense scrub of *Senna artemisioides* subsp. *filifolia* and *Ptilotus obovatus* in clay-loam soils;

CLP-AOW2 - Open Low Woodland of *Acacia aptaneura* and *Acacia caesaneura* over sparse scrub of *Acacia tetragonophylla* and *Hakea preissii* and moderately dense dwarf scrub of mixed Chenopods in clay-loam soils;

CLP-AOW3 - Open Low Woodland of *Acacia caesaneura* over sparse to moderately dense scrub of *Maireana sedifolia, Senna artemisioides* subsp. x *artemisioides, Senna cardiosperma, Atriplex bunburyana* and *Ptilotus obovatus* in clay-loam soils;

CLP-CFW1 - Low Forest of *Casuarina pauper* over open to sparse scrub of *Eremophila pantonii* and moderately dense low scrub of *Maireana pyramidata* and *Maireana sedifolia* in clay-loam plain;

CLP-CFW2 - Low Woodland of *Casuarina pauper* over moderately dense scrub of *Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* over sparse *Triodia basedowii* in clay-loam soils;

CLP-CFW3 - Low Woodland of *Casuarina pauper* over sparse to moderately dense scrub of *Eremophila scoparia, Olearia muelleri* and *Scaevola spinescens* in clay-loam soils;

CLP-CSSSF1 - Shrubland of Chenopod species with occasional emergent *Acacia ayersiana* and *Acacia caesaneura* over *Acacia kalgoorliensis* and *Hakea preissii* in clayloam soils;

CLP-EW1 - Low Woodland of *Eucalyptus salubris* over sparse scrub of *Acacia tetragonophylla, Eremophila scoparia, Atriplex vesicaria, Maireana triptera* and *Ptilotus obovatus* in clay-loam soils;

CLP-MWS1 - Open Tree Mallee of *Eucalyptus oleosa* subsp. *oleosa* over moderately dense *Dodonaea lobulata, Senna artemisioides* subsp. *filifolia, Olearia muelleri* and sparse *Triodia basedowii* in clay-loam soils;

CLP-MWS2 - Very Open Shrub Mallee of *Eucalyptus youngiana* with occasional *E. gongylocarpa* over moderately dense scrub of *Acacia desertorum* var. *desertorum, Callitris preissii, Leptospermum roei* and *Aluta maisonneuvei* subsp. *auriculata* in clayloam soils;

CLP-MWS3 - Open Shrub Mallee of *Eucalyptus concinna* and open low woodland of *Acacia caesaneura* over sparse scrub of *Eremophila scoparia* and *Scaevola spinescens* in clay-loam soils;

CLP-MWS4 - Open Tree Mallee of *Eucalyptus oleosa* subsp. *oleosa* over moderately dense scrub of *Eremophila scoparia* and *Scaevola spinescens* in clay-loam soils;

CLP-RMNV1 - Regrowth Low Forest of *Acacia aptaneura, Acacia caesaneura* and *Acacia incurvaneura* over moderately dense scrub of *Ptilotus obovatus* and *Solanum lasiophyllum* in clay-loam soils;

CLP-RMNV2 - Regrowth Shrub Mallee of *Eucalyptus* spp. over sparse to moderately dense regrowth scrub of *Acacia* spp., *Solanum plicatile* and *Velleia hispida* in clay-loam soils;

CLP-RMNV3 - Regrowth Open Low Woodland of *Eucalyptus gongylocarpa* over moderately dense scrub of *Acacia caesaneura, A. kempeana* and *Keraudrenia velutina* in clay-loam soils;

CD-AFW1 - Open Low Woodland of *Acacia caesaneura* over moderately dense scrub of *Melaleuca apostiba* (P3), *Eremophila miniata* and *Dodonaea viscosa* subsp. *angustissima* over sparse soft annual grass of *Aristida holathera* on drainage depression edge;

CD-AS1 - Open Scrub of *Acacia rigens* and *Eremophila miniata* over sparse low scrub of *Cratystylis subspinescens* and moderately dense to dense *Frankenia setosa* and *Tecticornia sp.* (Sterile) in clay drainage depression;

CD-AS2 - Open Scrub of *Acacia rigens, A. ramulosa* var. *ramulosa, Eremophila miniata* and *Eremophila scoparia* over sparse low scrub of *Cratystylis subspinescens* and moderately dense to dense *Frankenia setosa, Maireana amoena* and *Tecticornia sp.* (Sterile) in clay drainage depression;

CD-AS3 - Open Scrub of *Acacia rigens, A. ramulosa* var. *ramulosa* and *Eremophila miniata* over sparse low scrub of *Cratystylis subspinescens* and dense *Triodia basedowii* in clay drainage Depression;

CD-OS1 - Open Low scrub of *Dodonaea viscosa* subsp. *angustissima* and *Cratystylis subspinescens* over dense *Atriplex vesicaria, Maireana platycarpa* and *Frankenia setosa* in clay-loam drainage Depression;

D-EW1 - Open Low Woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. youngiana* over sparse scrub of *Callitris columellaris* and *Allocasuarina spinosissima* over moderately dense *Triodia basedowii* on sand dune;

D-EW2 - Occasional *E. gongylocarpa* over *Callitris columellaris/Grevillea juncifolia* over *Acacia ligulata/Thryptomene seriata/Anthotroche pannosa* over *Triodia desertorum* or *T. basedowii* on sand dune;

D-MWS1 - Occasional Shrub Mallee of *Eucalyptus youngiana* over sparse scrub of *Callitris preissii* and *Thryptomene biseriata* over moderately dense *Triodia basedowii* on sand dune;

D-OS1 - Scrub of *Casuarina pauper* over moderately dense low scrub of *Dodonaea viscosa* subsp. *angustissima* and *Dodonaea lobulata* over sparse soft grasses and *Triodia basedowii* on sand dune;

ISSP-AFW1 - Low Woodland of *Acacia caesaneura* over moderately dense *Acacia ramulosa* var. *ramulosa, Allocasuarina helmsii* and *Prostanthera althoferi* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-AFW2 - Low Woodland of *Acacia caesaneura* over moderately dense *Dodonaea rigida, Eremophila latrobei* subsp. *latrobei* and *Scaevola spinescens* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-AFW3 - Low Forest of *Acacia caesaneura* and *Acacia incurvaneura* over moderately dense scrub of *Acacia burkittii, Acacia tetragonophylla* and *Eremophila margarethae* over dense *Triodia desertorum* in sandy-loam soils;

ISSP-AFW4 - Low Forest of *Acacia ayersiana* and *Acacia incurvaneura* over moderately dense scrub of *Acacia grasbyi* and *Aluta maisonneuvei* subsp. *auriculata* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-AFW5 - Open Low Woodland to Woodland of *Acacia caesaneura* and *Acacia ayersiana* over *Acacia ramulosa* var. *ramulosa, Acacia tetragonophylla, Eremophila latrobei* subsp. *latrobei, Eremophila* spp., *Maireana triptera, Solanum lasiophyllum, Ptilotus obovatus* and *Eragrostis eriopoda* in sandy-loam soils;

ISSP-EW/MWS1 - Low Woodland of *Eucalyptus gongylocarpa* over moderately dense mallee of *E. concinna* and *E. youngiana* over moderately dense scrub of *Acacia desertorum* var. *desertorum* and *Acacia ligulata* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS2 - Low Woodland of *E. gongylocarpa* over sparse shrub mallee regrowth of *E. youngiana* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS3 - Low Woodland of *Eucalyptus hypolaena* over sparse shrub mallee of *E. concinna* over moderately dense scrub of *Acacia burkittii, A. ligulata* and *Senna artemisioides* subsp. *filifolia* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS4 - Low Woodland of *Eucalyptus salicola* over regrowth shrub mallee of *E. hypolaena* and moderately dense scrub of *Daviesia benthamii, Beyeria brevifolia* and *Eremophila scoparia* over dense *Triodia desertorum* in sandy-loam soils;

ISSP-EW/MWS5 - Low Woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. concinna* and moderately dense scrub of *Acacia helmsiana* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS6 - Low woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. commitae-vallis* over sparse scrub of *Callitris columellaris* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS7 - Low woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. concinna* and *E. horistes* over moderately dense dwarf scrub of *Leptosema chambersii* and *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS8 - Low woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. leptopoda* subsp. *elevata* over moderately dense dwarf scrub of *Leptosema chambersii* and *Triodia basedowii* in sandy-loam soils;

ISSP-EW/MWS9 - Low woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. concinna* and *E. youngiana* over moderately dense dwarf scrub of *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813) and *Triodia basedowii* in sandy-loam soils;

ISSP-EOW/MWS1 - Open Low Woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *E. youngiana* and moderately dense scrub of *Acacia assimilis* and *A. desertorum* var. *desertorum* over dense *Triodia basedowii* in sandy soils;

ISSP-EOW/MWS2 - Open Low Woodland of *Eucalyptus gongylocarpa* over moderately dense shrub Mallee of *E. youngiana/E. concinna* over open mixed shrubland over dense *Triodia desertorum* in sandy-loam soils;

ISSP-EW1 - Low Woodland of *Eucalyptus gongylocarpa* with occassional *E. youngiana* over sparse to moderately dense scrub of *Callitris columellaris* and *Hakea francisiana/ Acacia desertorum* var. *desertorum* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW2 - Low Woodland of *Eucalyptus lesouefii* over sparse scrub of *Eremophila scoparia, Senna artemisioides* subsp. *filifolia, Olearia muelleri* and *Ptilotus obovatus* over sparse *Triodia basedowii* in sandy-loam soils;

ISSP-EW3 - Low Woodland of *Eucalyptus salicola* over sparse scrub of *Eremophila deserti, Dodonaea rigida* and *Senna artemisioides* subsp. *filifolia* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW4 - Open Low Woodland of *Eucalyptus gongylocarpa* over moderately dense scrub of *Hakea francisiana* and dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW5 - Low woodland of *Eucalyptus gongylocarpa* over sparse scrub of *Callitris columellaris* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-EW6 - Low woodland of *Eucalyptus gongylocarpa* over sparse scrub of *Acacia abrupta* and *Callitris columellaris* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-H1 - Dense Heath of *Acacia desertorum* var. *desertorum* over moderately dense scrub of *Melaleuca hamata* and *Melaleuca leiocarpa* over dense *Triodia desertorum* and *T. basedowii* in sandy-loam soils;

ISSP-H2 - Heath of *Allocasuarina campestris* over sparse scrub of *Aluta maisonneuvei* subsp. *auriculata* and *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813) over dense *Triodia basedowii* and *T. desertorum* in sandy soils;

ISSP-MWS1 - Open Shrub Mallee of *Eucalyptus concinna* over moderately dense scrub of *Dodonaea lobulata, Senna artemisioides* subsp. *filifolia* and open dwarf scrub of *Maireana platycarpa* and *Ptilotus obovatus* in sandy-loam soils;

ISSP-MWS2 - Open Shrub Mallee of *Eucalyptus concinna* and *E. oleosa* subsp. *oleosa*over open to sparse scrub of *Grevillea juncifolia* subsp. *juncifolia* and *Scaevola spinescens* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS3 - Open Shrub Mallee of *Eucalyptus concinna* and *E. oleosa* subsp. *oleosa* over moderately dense *Dodonaea lobulata, Dodonaea rigida* and *Scaevola spinescens* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS4 - Very Open Shrub Mallee of *Eucalyptus concinna* over moderately dense *Acacia ramulosa* var. *ramulosa, Allocasuarina helmsii* and *Prostanthera althoferi* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS5 - Open Shrub Mallee of *Eucalyptus trivalva* and *E. youngiana* over low woodland of *Acacia caesaneura* and sparse scrub of *Acacia rigens* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS6 - Open Shrub Mallee of *Eucalyptus concinna* and *E. oleosa* subsp. *oleosa* over sparse scrub of *Callitris columellaris* and *Hakea francisiana* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS7 - Shrub Mallee of *Eucalyptus concinna* and *E. oleosa* subsp. *oleosa* over moderately dense scrub of *Acacia hemiteles, Melaleuca hamata* and *Westringia cephalantha* over dense *Triodia basedowii* in sandy-loam

soils;

ISSP-MWS8 - Open Shrub Mallee of *Eucalyptus trivalva* and *E. youngiana* over moderately dense scrub of *Hakea francisiana* and mixed *Acacia* spp. over dense *Triodia basedowii/T. desertorum* in sandy-loam soils;

ISSP-MWS9 - Open Tree Mallee of *Eucalyptus horistes* over moderately dense scrub of *Eremophila deserti* and *Acacia rigens* over moderately dense *Triodia desertorum* and *Triodia basedowii* in sandy-loam soils;

ISSP-MWS10 - Open Tree Mallee of *Eucalyptus concinna* and *E. oleosa* subsp. *oleosa* over moderately dense scrub of *Acacia caesaneura, Eremophila pantonii* and *Senna artemisioides* subsp. *filifolia* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS11 - Open Shrub Mallee of *Eucalyptus comitae-vallis* and *E. youngiana* over sparse to moderately dense scrub of *Grevillea juncifolia* subsp. *juncifolia* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS12 - Open Shrub Mallee of *Eucalyptus hypolaena* over moderately dense scrub of *Callitris preissii, Daviesia benthamii* and *Westringia cephalantha* over dense *Triodia basedowii* and *T. desertorum* in sandy-loam soils;

ISSP-MWS13 - Shrub Mallee of *Eucalyptus concinna, E. oleosa* subsp. *oleosa* and *E. rigida* over sparse scrub of *Daviesia benthamii, Acacia assimilis* and *A. caesaneura* over dense *Triodia desertorum* in sandy-loam soils;

ISSP-MWS14 - Tree Mallee of *Eucalyptus eremophila* over moderately dense low woodland of *Acacia caesaneura* and *A. incurvaneura* and sparse scrub of *A. aptaneura* and *Eremophila scoparia* over dense *Triodia desertorum* in sandy-loam soils;

ISSP-MWS15 - Shrub Mallee of *Eucalyptus concinna* over moderately dense scrub of *Halgania integerrima* and *Hakea francisiana* over moderately dense *Triodia desertorum* in sandy-loam soils;

ISSP-MWS16 - Very Open Shrub Mallee of *Eucalyptus leptopoda* subsp. *elevata* and *E. youngiana* over moderately dense scrub of *Acacia desertorum* var. *desertorum* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS17 - Open Shrub Mallee of *Eucalyptus youngiana* and *E. rigidula* over moderately dense scrub of *Acacia desertorum* var. *desertorum* and *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813) over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS18 - Open Shrub Mallee of *Eucalyptus youngiana* and sparse *Callitris preissii* over mixed shrubs over open to moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS19 - Open Shrub Mallee of *Eucalyptus trivalva* over *Acacia* and *Eremophila* dominated shrubland over sparse to open *Triodia basedowii* in sandy-loam soils;

ISSP-MWS20 - Open Shrub Mallee of *Eucalyptus trivalva* over sparse scrub of *Acacia sibirica* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS21 - Open Shrub Mallee of *Eucalyptus trivalva* over moderately dense scrub of *Acacia desertorum* var. *desertorum* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS22 - Open Shrub Mallee of *Eucalyptus commitae-vallis* and *E. youngiana* over sparse scrub of *Callitris columellaris* and dwarf scrub of *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813) and *Beyeria sulcata* var. *sulcata* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS23 - Open Shrub Mallee of *Eucalyptus youngiana* over moderately dense scrub of *Acacia desertorum* var. *desertorum* and *Allocasuarina acutivalvis* over moderately dense dwarf scrub of *Aluta maisonneuvei* subsp. *auriculata* and moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS24 - Open Shrub Mallee of *Eucalyptus leptopoda* subsp. *elevata* over sparse scrub of *Callitris preisii* and moderately dense dwarf scrub of *Aluta maisonneuvei* subsp. *auriculata* and *Phebalium filifolium* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS25 - Open Shrub Mallee of *Eucalyptus leptopoda* subsp. *elevata* over sparse scrub of *Acacia desertorum* var. *desertorum* and *Callitris preisii* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS26 - Open Shrub Mallee of *Eucalyptus leptopoda* subsp. *elevata* over moderately dense low scrub of *Aluta maisonneuvei* subsp. *auriculata* and *Melaleuca interioris* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-MWS27 - Open Shrub Mallee of *Eucalyptus horistes* over moderately dense low scrub of *Acacia assimilis* and *A. desertorum* var. *desertorum* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-RMNV1 - Regrowth Open Shrub Mallee of *Eucalyptus concinna* and *E. oleosa subsp. oleosa* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-RMNV2 - Regrowth Open Shrub Mallee of *Eucalyptus concinna* and *E. oleosa subsp. oleosa* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-RMNV3 - Regrowth Open Shrub Mallee of *Eucalyptus glomerosa* over moderately dense scrub of *Acacia*

desertorum var. *desertorum* and *Aluta maisonneuvei* subsp. *auriculata* over moderately dense *Triodia basedowii* in sandy-loam soils;

ISSP-RMNV4 - Regrowth Open Shrub Mallee of *Eucalyptus trivalva* and *E. youngiana* over dense scrub of *Acacia rigens* and *Melaleuca leiocarpa* over dense *Triodia basedowii* in sandy-loam soils;

ISSP-RMNV5 - Regrowth open low woodland of *Eucalyptus gongylocarpa* over moderately dense *Leptosema chambersii* and *Newcastelia hexarrhena* in sandy-loam soils;

ISSP-RMNV6 - Regrowth open low woodland of *Eucalyptus gongylocarpa* over sparse shrub mallee of *Eucalyptus glomerosa* over dense *Triodia basedowii* in sandyloam soils;

ISSP-RMNV7 - Regrowth Very Open Shrub Mallee of *Eucalyptus* sp. sterile over sparse low scrub of *Acacia assimilis* and *Hakea fransciana* over dense *Triodia basedowii* in sandy-loam soils;

RH-AFW1 - Low Woodland of *Acacia burkittii* over moderately dense scrub of *Maireana sedifolia, Senna artemisioides* subsp. x *artemisioides, Senna cardiosperma*, *Atriplex bunburyana* and *Ptilotus obovatus* on quartz low slope;

RH-AFW2 - Low Forest of *Acacia ayersiana, Acacia caesaneura* and *Acacia incurvaneura* over open to sparse scrub of *Acacia tetragonophylla, Scaevola spinescens* and moderately dense low scrub of *Ptilotus obovatus* on rocky rise;

RH-AFW3 - Low Woodland of *Acacia caesaneura* over moderately dense scrub of *Maireana sedifolia, Senna artemisioides* subsp. x *artemisioides, Senna cardiosperma,* A*triplex bunburyana* and *Ptilotus obovatus* on quartz low slope;

RH-AFW4 - Low Woodland of *Acacia ayersiana, Acacia incurvaneura* and *Acacia ramulosa* var. *ramulosa* over sparse scrub of *Acacia tetragonophylla, Eremophila pantonii, Senna artemisioides* subsp. *filifolia* and *Ptilotus obovatus* on rocky rise;

RH-AFW5 - Low Woodland of *Acacia ayersiana, Acacia incurvaneura* and *Acacia ramulosa* var. *ramulosa* over sparse scrub of *Acacia tetragonophylla, Dodonaea lobulata, Senna artemisioides* subsp. *filifolia* and *Ptilotus obovatus* on rocky rise;

RH-AFW6 - Low Woodland of *Acacia incurvaneura* over moderately dense scrub of *Aluta maisonneuvei* subsp. *auriculata* over sparse *Triodia basedowii* on rocky rise;

RH-AFW7 - Forest to Woodland of *Acacia ayersiana* and *Acacia caesaneura* over *Eremophila margarethae* and *Acacia tetragonophylla* over Poaceae and Asteraceae spp. in clay with quartz and ironstone pebbles;

RH-CFW1 - Low Forest of *Casuarina pauper* over open to sparse scrub of *Eremophila pantonii* and mid-dense low scrub of *Maireana pyramidata* and *Maireana sedifolia* on rocky rise; and

Salt Lake

Clearing Description

Eastern Goldfields Pipeline.
APA Operations Pty Ltd (APA) proposes to clear up to 1,000 hectares within a boundary of approximately 9,361 hectares for the purposes of pipeline construction and associated activities. The project starts approximately 50 kilometres south-west of Laverton and runs in a general easterly direction for approximately 294 kilometres.

Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

to

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment

The vegetation condition was derived from reports prepared by Botanica Consulting (2014a; 2014b).

The proposed pipeline is to connect gas to the Tropicana Gold Mine from the Goldfields Gas Pipeline. On average the pipeline licence is a width of 200 metres. The proposed clearing will be for a 30 metre wide construction right of way (APA Group, 2015). Along with the trenching of the pipeline, the construction will also require temporary construction support areas including a construction camp, site offices, ablutions and laydown areas (APA Group, 2015). Following the pipeline construction all areas will be rehabilitated apart from an access track and five above ground facilities which include control huts, metres, filter skids and security fencing.

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is at variance to this Principle
The two vegetation surveys of the application area recorded a total of 129 vegetation communities (Botanica Consulting, 2014a; 2014b). Given the application area spans a length of 294 kilometres it would be expected that a high number of vegetation communities would be present. The vegetation of the application area was in 'good' to 'very good' condition. The primary causes of disturbance within the application area were caused by mining and pastoral activities (APA Group, 2014). None of the vegetation communities were identified as being

a Threatened Ecological Community (Botanica Consulting, 2014a; 2014b).

The application area passes through two mapped Priority Ecological Communities (PECs); 'Mount Jumbo Range vegetation complex' and 'Mount Morgan calcrete groundwater assemblage type on Carey palaeodrainage on Mount Weld Station' (GIS Database). The vegetation community RS-AFW3 was considered to represent the 'Mount Jumbo Range vegetation complex' PEC (Botanica Consulting, 2014a). The proposed pipeline route has been positioned in a gap to avoid rises of the Mount Jumbo Range. This will avoid impacts to a number of Banded Ironstone Formation specialist species. Within the PEC the width of the construction right of way will be reduced to 20 metres (APA Group, 2014). There was 43 hectares of this vegetation community mapped during the flora survey of which 34.4 hectares is within the application area (Botanica Consulting, 2014a). There is 2.2 hectares of this PEC proposed to be cleared by this application (APA Group, 2014).

The vegetation community D-MWS1 was identified by Botanica Consulting (2014b) as being representative of vegetation that characterises the 'Yellow sandplain communities of the Great Victoria Desert' PEC. The application area is greater than 20 kilometres north of the mapped extent of this PEC (GIS Database). It has not been confirmed that D-MWS1 is an occurrence of the PEC (DPaW, 2014). There was 56.8 hectares of vegetation community D-MWS1 mapped within the application area. The construction right of way will be reduced to a width of 25 metres within the D-MWS1 community (APA Group, 2014). The proposed amount of clearing of this vegetation community is 1.3 hectares (APA Group, 2014). The clearing of 1.3 hectares is not likely to have a significant impact on this PEC.

The 'Mount Morgan calcrete groundwater assemblage type on Carey palaeodrainage on Mount Weld Station' PEC is a subterranean community. Given this, the proposed clearing is not likely to have an impact on this community.

The flora survey of the western section of the application area (Murrin Murrin to Sunrise Dam) recorded a total of 214 flora taxa from 83 genera and 37 families (Botanica Consulting, 2014a). The flora survey of the eastern section (Sunrise Dam to Tropicana) of the application area recorded a total of 281 flora taxa from 114 genera and 43 families (Botanica Consulting, 2014b). There were five introduced species recorded from Murrin Murrin to Sunrise Dam, however, no weed species were recorded between Sunrise Dam and Tropicana (Botanica Consulting, 2014a; 2014b). No species of Threatened flora were recorded within the application area (Botanica Consulting 2014a; 2014b). There were eight species of Priority flora recorded within the application area; *Caesia talingka* (Priority 2), *Acacia eremophila* numerous-nerved variant (Priority 3), *Labichea eremaea* (Priority 3), *Melaleuca apostiba* (Priority 3), *Dicrastylis cundeeleensis* (Priority 4), *Grevillea inconspicua* (Priority 4), *Grevillea secunda* (Priority 4) and *Olearia arida* (Priority 4) (Botanica Consulting, 2014a; 2014b).

There were 50 individuals of *Caesia talingka* recorded from one location within the application area (Botanica Consulting, 2014b). *Labichea eremaea* was recorded from one individual within the application area (Botanica Consulting, 2014b). There were approximately 250 *Melaleuca apostiba* individuals recorded at four locations within the application area (Botanica Consulting, 2014b). None of the identified individuals of these three species are proposed to be cleared by this project (APA Group, 2014). Potential impacts to these species may be minimised by the implementation of a flora management condition.

There were approximately 500 *Acacia eremophila* numerous-nerved variant individuals recorded from three locations within the application area (APA Group, 2014; Botanica Consulting, 2014b). The proposed clearing will remove approximately 100 of the 500 recorded (APA Group, 2014). *Dicrastylis cundeeleensis* was recorded at five locations within the application area (Botanica Consulting, 2014b). There were 1,084 individuals recorded of which 1,000 are proposed to be cleared (APA Group, 2014). Nine individuals of *Grevillea inconspicua* were recorded within the application area, of which one is proposed to be impacted (APA Group, 2014). *Grevillea secunda* was recorded at numerous locations within the application area (Botanica Consulting, 2014b). There were 622 individuals recorded of which 160 are proposed to be removed (APA Group, 2014). *Olearia arida* was also recorded from a number of locations within the application area (Botanica Consulting, 2014b). Of the 190 present in the application area, clearing for the pipeline will remove 21 individuals (APA Group, 2014). DPaW (2014) has advised that the proposed impacts to Priority flora are not likely to be significant provided the activities only remove the amount of individuals currently proposed.

Fauna surveys over the length of the application area recorded a total of 157 fauna species comprising of one amphibian, 50 reptile, 78 bird and 19 native mammal species (APA Group, 2014). There were 31 major fauna habitats identified over the length of the application area (APA Group, 2014). The application area has a potentially rich fauna assemblage due to the variety of habitats it crosses and because several of the habitats are likely to support restricted fauna species (Kingfisher Environmental Consulting, 2014a; 2014b). Given the proposed clearing is a narrow corridor over a long distance it is not likely to have a significant impact on faunal diversity in the local area. The greatest impact to faunal diversity from the proposed clearing is likely to be from the creation of an invasion pathway for weed species and feral predators. Specific management measures that will be implemented include having wash down points prior to entering construction areas, regularly inspecting cleared areas to record new observation of weed species and monitoring tracks for goat activity (APA Group, 2014). Potential impacts to biodiversity may be minimised by the implementation of a weed management condition.

Based on the above, the proposed clearing is at variance to this Principle.

Methodology APA Group (2014)

Botanica Consulting (2014a)
Botanica Consulting (2014b)
DPaW (2014)
Kingfisher Environmental Consulting (2014a)
Kingfisher Environmental Consulting (2014b)
GIS Database:
- Threatened Ecologcal Sites Buffered

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal is at variance to this Principle

A level 1 fauna survey was conducted over the length of the application area from 7-14 October 2013 and 4-17 November 2013. A targeted survey was conducted from 22 May to 1 June 2014. The surveys over the application area identified the following 31 fauna habitats (Kingfisher Environmental Consulting, 2014a; 2014b):

Salt Lake Systems

1. Salt lakes and saline drainage systems with fringing saline plains supporting halophytic shrublands (*Tecticomia* spp.) and scattered tall Acacia;
2. Sandy rises and low sand dunes fringing salt lakes supporting mixed Acacia shrublands with *Dodonaea viscosa;*
3. Saline plains supporting low Saltbush (*Atriplex* spp.) and Bluebush (*Maireana* spp.) chenopod shrublands
4. Gypsiferous rises fringing salt lakes supporting mixed Acacia shrubs, *Casuarina pauper* and *Lawrencia helmsii;*

Broad Stony / Hardpan Plains

5. Stony alluvial plains supporting low Bluebush (*Maireana* spp.) and Saltbush (*Atriplex* spp.) shrublands;
6. Stony plains supporting sparse Mulga (*Acacia aneura*) and other mixed Acacia shrublands over soft sparse soft grasses;
7. Broad drainage tracts supporting dense Mulga and mixed Acacia shrublands;
8. Gently undulating gravelly plains and low stony rises supporting mixed Acacia (*A. aneura* and *A. ramulosa*) shrublands with areas of patchy halophytic shrublands;
9. Hardpan clay plains supporting Mulga woodland;

Sandplains

10. Sandplains supporting Mulga woodland over Wanderrie grasses with mixed Acacia and *Eremophila* spp. shrubs;

Banded Ironstone Hills and Ridges

11. Banded Ironstone Formation (BIF) Ridges supporting Acacia shrublands (particularly *A. aneura*);

Greenstone Hills and Ridges

12. Greenstone Hills supporting mixed Acacia shrublands (particularly *A. aneura*) with *Eremophila, Senna* and *Ptilotus* species;

Low Gravelly Rises

13. Gently undulating gravelly plains and low stony rises supporting mixed Acacia (*Acacia aneura* and *Acacia ramulosa*) shrublands with areas of *Casuarina pauper* and patchy halophytic shrublands;
14. Low gravelly rises and plateaus supporting dense Acacia (particularly *Acacia aneura, Acacia ayersiana* and *Acacia ramulosa*) and *Allocasuarina campestris* thickets;

Loam Plains

15. Loam plains supporting Goldfields Black Butt (*Eucalyptus lesouefii*) Woodland with Gimlet (*Eucalyptus salubris*) and scattered mixed shrubs particularly *Eremophila scoparia;*

Great Victoria Desert Sandplains

16. Low lying sandplains supporting Spinifex (*Triodia basedowii*) Hummock Grassland with scattered low Acacia shrubs;
17. Sandplain supporting Mallee (*Eucalyptus youngiana*) over Spinifex (*Triodia basedowii*) Hummock Grasslands;
18. Elevated sandplain supporting Marble Gum (*E. gongylocarpa*) Woodland over Spinifex (*Triodia basedowii*) Hummock Grassland;
19. Elevated Sandplain supporting mixed Woodland, particularly of *Callitris columellaris, E. gongylocarpa, E. youngiana* over Spinifex (*Triodia basedowii*) Hummock Grassland;
20. Yellow Sandplain Communities supporting Marble Gum (*Eucalyptus gongylocarpa*), Mallee (*Eucalyptus mannensis, Eucalyptus undulans, Eucalyptus youngiana* and *eucalyptus platycorys*), *Acacia heteroneura, Acacia helmsiana, Allocasuarina acutivalvis, Bertya dimerostigma, Hakea francisiana, Triodia desertorum* or *Triodia scariosa* and *Xanthorrhoea thorntonii;*
21. Sandy clay plains supporting Mulga (*Acacia aneura*) over Spinifex (*Triodia basedowii*) Hummock Grassland;
22. Dense Mallee (including *Eucalyptus concinna* and *E. oleosa*) over Spinifex (*Triodia* spp.) Hummock Grassland;

23. Pale Yellow sandplain supporting low Proteaceous heath (*Melaleuca* spp., *Banksia* sp. and *Grevillea juncifolia*), scattered Mallee (*Eucalyptus* spp.) and Spinifex (*Triodia* spp.) Hummock Grassland;
24. Orange Sandplain Communities supporting mixed Eucalypt Woodland / Mallee (*Eucalyptus gongylocarpa, Eucalyptus youngiana*) with Spinifex (*Triodia basedowii*) Hummock Grassland;

Sand Dune Systems

25. Sand dunes supporting Marble Gum (*E. gongylocarpa*), *Callitris columellaris,* mixed shrublands (including *Acacia* spp. and *Thryptomene biseriata*) over sparse *Triodia* spp. hummock grasslands and sedge like perennials;
26. Sandy rises supporting dense Acacia shrublands (*Acacia aneura, Acacia ramulosa*) and *Thryptomene biseriata;*
27. Long-unburnt (relictual) patches of Mulga (*Acacia aneura*) with *Eremophila forrestii, Aluta maisonneuvei* and *Thryptomene biseriata* understory, on interdunal flats between sand ridges;

Calcareous Plains

28. Calcareous plains supporting *Casuarina pauper* woodland over *Eremophila scoparia;*

Low Hills and Outcrops

29. Low silcrete / granitic rocky hills and outcrops supporting mixed Acacia shrublands (including *Acacia aneura, Acacia ayersiana*);
30. Gravelly breakaways fringing saline depressions supporting Mallee (*Eucalyptus* spp.); and
31. Ironstone hills and stony rises supporting *Acacia aneura* Woodland.

The majority of these fauna habitats are considered widespread and well represented in the region (Kingfisher Environmental Consulting, 2014a; 2014b). Several of the habitats are considered to be significant fauna habitats due to them supporting significant fauna species, being restricted or relict habitats (Kingfisher Environmental Consulting, 2014a; 2014b).

The fauna surveys over the application area recorded a number of conservation significant fauna species including (APA Group, 2014):

- Malleefowl (*Leipoa ocellata* - Schedule 1; Vulnerable)
- Southern Marsupial Mole (*Notoryctes typhlops* - Schedule 1; Endangered)
- Sandhill Dunnart (*Sminthopsis psammophila* - Schedule 1; Endangered)
- Brush-tailed Mulgara (*Dasycercus blythi* - Priority 4)
- Striated Grasswren (*Amytornis striatus striatus* - Priority 4)
- Australian Bustard (*Ardeotis australis* - Priority 4)
- Rainbow Bee-eater (*Merops ornatus* - Migratory)
- Southern Scrub-robin (Locally significant)

The fauna surveys recorded 19 Malleefowl mounds of which at least two were active (Kingfisher Environmental Consulting, 2014b). All of the mounds were recorded within 2 kilometres of the application area, however, only two of the mounds are located within the application area itself. The two mounds within the application area were not active mounds (Kingfisher Environmental Consulting, 2014b). The Malleefowl mounds were found within dense mulga woodland habitat (habitats 9 and 10) (Kingfisher Environmental Consulting, 2014b). There was one inactive mound found on a gravelly rise within habitat 9 approximately 20 kilometres east of Sunrise Dam Gold Mine (Kingfisher Environmental Consulting, 2014b). Habitat in this area is likely to support several breeding pairs as it extends outside the application area along a low ironstone rise and plateau (Kingfisher Environmental Consulting, 2014b). Habitat 9 was restricted to a gravelly rise 20 kilometres east of Sunrise Dam, on the flanks of the Irwin Hills (90 kilometres east of Sunrise Dam) and on the slopes of BIF ridges (Kingfisher Environmental Consulting, 2014b). Habitat 10 occurs in small patches typically between sand ridges of the Great Victoria Desert (Kingfisher Environmental Consulting, 2014b). There were 18 mounds recorded within this habitat, all of which were within 30 kilometres of the Tropicana Gold Mine (Kingfisher Environmental Consulting, 2014b). The number of mounds recorded from varying stages of activity suggests there is an ongoing breeding population near Tropicana (Kingfisher Environmental Consulting, 2014b). There has been 202.3 hectares of Malleefowl habitat mapped within the application area, of which 24.2 hectares is within the proposed construction right of way (APA Group, 2014). A larger area of this habitat was also mapped outside of the application area (Kingfisher Environmental Consulting, 2014b). APA has committed to avoiding Malleefowl mounds within the application area with a 50 metre buffer (APA Group, 2014). Whilst some breeding habitat will be cleared, the application area avoids the majority of the Mulga remnants identified during the surveys (Kingfisher Environmental Consulting, 2014b). Potential impacts to Malleefowl may be minimised by the implementation of a fauna management condition.

The Southern Marsupial Mole is known from limited records but is distributed throughout the desert areas of central Australia. It rarely ventures above ground and appears to favour dunes and sandy plains with deep, loose sand (Department of the Environment, 2014). Evidence of mole tunnelling was recorded from five locations during the fauna survey (Kingfisher Environmental Consulting, 2014b). These tunnels were located on crests and slopes of yellow sand dunes with extensive dune fields supporting Marble Gum and Callitris with a scattered spinifex hummock grassland understorey (Kingfisher Environmental Consulting, 2014b). None of the recorded tunnels are within the application area, however, the Southern Marsupial Mole would utilise suitable habitat within the permit boundary. Approximately 68.5 hectares of suitable habitat is within the application area, of which 3.2 hectares is proposed to be cleared (APA Group, 2014). The National Recovery Plan for Marsupial Moles notes that pipeline trenches may hinder dispersal of marsupial moles and might

genetically isolate populations that were previously continuous (Benshemesh, 2004). Compaction of sandy areas may also inhibit the dispersion of marsupial moles. Whilst the proposed clearing will only disturb a minor amount of suitable habitat for Southern Marsupial Moles, it is not known what impact the proposed activities will have on the movement of the species throughout the region.

The Sandhill Dunnart is currently known from the Eyre Peninsula and Great Victoria Desert in South Australia and the Great Victoria Desert in Western Australia (Churchill, 2001). Within Western Australia the Sandhill Dunnart has primarily been found within the 'Yellow sandplain communities of the Great Victoria Desert' Priority Ecological Community (PEC). Sandhill Dunnarts nest in large spinifex hummocks that have begun to die off in the centre (Churchill, 2001). For this reason Sandhill Dunnarts have been previously observed to prefer areas that have not been burnt for 8-20 years (Churchill, 2001). There were four Sandhill Dunnarts recorded during the fauna survey of the application area (Kingfisher Environmental Consulting 2014b). All records were from vegetation comprised of long-unburnt and mature spinifex with a variable and complex shrub layer in association with a yellow sand dune (Kingfisher Environmental Consulting, 2014b). These records are significant as they are the only records within Western Australia since 2007 (DPaW, 2014). They are also the most northerly records of this species in Western Australia. The clearing for a 294 kilometre pipeline has the potential to increase the spread of weed species into new areas. In particular, Buffel Grass (*Cenchrus ciliaris*) has been identified as a particular threat to this species as it changes the structure of spinifex dominated habitats which this species utilises (Woinarski et al., 2012). Buffel grass can also make an area prone to more frequent and hotter fires which can reduce the availability of larger spinifex hummocks. This negatively impacts the Sandhill Dunnart as it utilises larger spinifex hummocks. Following construction of the pipeline APA Operations Pty Ltd will conduct weed monitoring and control of weed species to minimise their spread (APA Group, 2014). Potential impacts from weeds may be minimised by the implementation of a weed management condition. Opening up access into the Sandhill Dunnarts habitat may also increase the risk of fire due to increased human activities. The access road may also facilitate the movement of feral predators into the area. There was 598.9 hectares of suitable Sandhill Dunnart habitat mapped within the application area of which 67.14 hectares is proposed to be cleared (APA Group, 2014). Clearing for the right of way will be reduced to 25 metres in sensitive area such as Sandhill Dunnart habitat to minimise the disturbance of this habitat (APA Group, 2014). There are areas of suitable habitat in the wider area surrounding the application area, however, it is not known if it is utilised by the Sandhill Dunnart. It is also not known if the clearing for the pipeline will cause local populations to be significantly fragmented given the long time required for spinifex to regrow to preferred sizes. Knowledge gaps about impacts to this species may be improved by the implementation of a monitoring condition.

The Brush-tailed Mulgara was recorded from 16 locations within the application area (Kingfisher Environmental Consulting, 2014b). There were two individuals trapped and the other records were of burrows (Kingfisher Environmental Consulting, 2014). All records were from the Sunrise Dam to Tropicana section of the pipeline. All records of Mulgara were from sandplain areas which are dominated by spinifex with scattered low Acacia shrubs (Kingfisher Environmental Consulting, 2014b). There was 984.9 hectares of Mulgara habitat mapped within the application area of which 148.6 hectares is proposed to be cleared (APA Group, 2014). Mulgara inhabit spinifex grasslands in arid sandy regions throughout central Western Australia. The proposed clearing of Mulgara habitat is not expected to have a significant impact on this species in the Great Victoria Desert.

The sandplain subspecies of the Striated Grasswren has a scattered distribution across the Great Victoria, Gibson and Tanami deserts. This species inhabits sandplains dominated by mature spinifex and is threatened by extensive wildfires burning this habitat (Kingfisher Environmental Consulting, 2014b). The Striated Grasswren was recorded from three locations from fauna habitat 23 (Kingfisher Environmental Consulting 2014b). This habitat was restricted to an area west of Hope Cambell Lake. This species is sparsely distributed in the region so the proposed clearing has the potential to impact this species on a local level.

The Southern Scrub-robin was recorded from ten locations in dense mulga woodland at the eastern end of the survey area (Kingfisher Environmental Consulting, 2014b). This species is considered locally significant as these records represent a significant range extension east (over 300 kilometres) (Kingfisher Environmental Consulting, 2014b). There was only one record within the application area, however, the proposed clearing will remove habitat for this species. The biggest threat to this species in the area is fire as the dense mulga woodland requires an extended period to develop the structural complexity to support the Southern Scrub-robin (Kingfisher Environmental Consulting, 2014b). Care should be taken to ensure that no fires are started during clearing and pipeline construction activities.

The Australian Bustard and Rainbow Bee-eater have a wide distribution across the state. The clearing within the application area is not likely to have a significant impact on habitat for these species.

Based on the above, the proposed clearing is at variance to this Principle.

Methodology

APA Group (2014)
Benshemesh (2004)
Churchill (2001)
Department of the Environment (2014)
DPaW (2014)
Kingfisher Environmental Consulting (2014a)
Kingfisher Environmental Consulting (2014b)
Woinarski et al. (2012)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposal is not likely to be at variance to this Principle
According to available databases, there are no records of any Threatened flora species within the application area (GIS Database). The flora surveys of the application area did not record any Threatened flora species (Botanica Consulting, 2014a; 2014b).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

Botanica Consulting (2014a)
Botanica Consulting (2014b)
GIS Database:
- WAHerbs

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments

Proposal is not likely to be at variance to this Principle
According to available databases, there are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The vegetation survey of the application area did not identify any communities listed as a TEC (Botanica Consulting 2014a; 2014b).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

Botanica Consulting (2014a)
Botanica Consulting (2014b)
GIS Database:
- Threatened Ecological Sites Buffered

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments

Proposal is not at variance to this Principle
The application area falls within both the Murchison and Great Victoria Desert Interim Biogeographic Regionalisation of Australia (IBRA) bioregions in which over 99% of the pre-European vegetation remains (see table) (GIS Database; Government of Western Australia, 2013).

The vegetation of the application area has been broadly mapped as Beard vegetation associations 18, 19, 39, 84, 389 and 1239 (GIS Database). These vegetation associations have not been extensively cleared as over 99% remains at both a state and bioregional level for all vegetation associations (see table) (Government of Western Australia, 2013). There has not been extensive clearing in the local region and the vegetation the application area passes through is not a remnant nor does it form part of any remnants within the local area.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DEC Managed Land
IBRA Bioregion – Great Victoria Desert	21,794,222	21,784,887	~99.9	Least Concern	8.46
IBRA Bioregion – Murchison	28,120,586	28,044,823	~99.7	Least Concern	7.70
Beard veg assoc. – State					
18	19,892,304	19,843,727	~99.8	Least Concern	6.29
19	4,385,295	4,384,249	~99.9	Least Concern	0.63
39	6,613,569	6,602,580	~99.8	Least Concern	12.11
84	1,799,366	1,799,366	~100	Least Concern	9.23
389	642,356	640,468	~99.7	Least Concern	3.58
1239	2,234,315	2,234,315	~100	Least Concern	11.85
Beard veg assoc. – Great Victoria Desert Bioregion					
18	1,954,628	1,954,625	~100	Least Concern	9.22
19	2,866,601	2,866,298	~99.9	Least Concern	0
39	1,183,999	1,183,999	~100	Least Concern	2.96
84	1,781,533	1,781,533	~100	Least Concern	9.32
389	147,692	147,692	~100	Least Concern	0
1239	2,233,684	2,233,684	~100	Least Concern	11.85
Beard veg assoc. - Murchison					
18	12,403,172	12,363,252	~99.7	Least Concern	4.96
19	104,884	104,882	~99.9	Least Concern	22.02
39	1,148,400	1,138,064	~99.1	Least Concern	3.58
84	17,833	17,833	~100	Least Concern	0.74
389	493,977	492,089	~99.6	Least Concern	4.65
1239	558	558	~100	Least Concern	41.13

* Government of Western Australia (2013)
** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002)
Government of Western Australia (2013)
GIS Database:
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal is at variance to this Principle**
The application area crosses numerous non-perennial watercourses (GIS Database). The majority of the watercourses are at the western end of the application area and are associated with drainage into Lake Carey which the application area borders (GIS Database). The application area also includes some ephemeral salt lakes associated with the Hope Campbell Lake system (GIS Database). Hope Campbell Lake is located

approximately 500 metres north of the application area (GIS Database). Following the pipeline construction, all areas will be rehabilitated apart from an access track and five above ground facilities.

Given the project will clear vegetation growing in association with watercourses, the proposed clearing is at variance to this Principle. However, the proposed activities are not likely to result in a significant impact to waterbodies in the area.

Methodology GIS Database:
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not likely to be at variance to this Principle**
The following land systems have been mapped as occurring within the application area; Bevon, Brooking, Bullimore, Carnegie, Crete, Gundockerta, Hootanui, Jundee, Leonora, Mileura, Monitor, Monk, Nubev, Rainbow, Steer, Sunrise, Teutonic, Violet and Yowie land systems (GIS Database). The Brooking, Bullimore, Carnegie, Jundee, Rainbow, Sunrise, Teutonic, Violet and Yowie land systems are all generally not susceptible to erosion (Pringle et al., 1994). The other land systems have varying susceptibility to erosion (Pringle et al., 1994):

- Bevon: Breakaway footslopes and narrow drainage tracts are susceptible to soil erosion, particularly if shrub cover is removed.
- Crete: Lower footslopes, alluvial fans and drainage lines are susceptible to water erosion, particularly if shrub cover is removed.
- Gundockerta: Saline plains and lower alluvial tracts are susceptible to water erosion, particularly if shrub cover is reduced.
- Hootanui: Narrow drainage tracts and breakaway footslopes are susceptible to erosion.
- Leonora: Drainage tracts are highly susceptible to water erosion.
- Mileura: Alluvial plains are moderately to highly susceptible to water erosion, particularly when shrub cover is removed.
- Monitor: Alluvial fans, drainage tracts and hardpan plains are highly susceptible to erosion.
- Monk: Drainage tracts are slightly susceptible to erosion.
- Nubev: Drainage zones are moderately susceptible to soil erosion, particularly when shrub cover is removed.
- Steer: Drainage floors are susceptible to erosion.

Land system mapping is only available for the western half of the application area. The eastern section of the pipeline corridor is mostly comprised of plains and dunes (longitudinal and ring dunes with interdune corridors and plains) with occasional salt pans (GIS Database; Northcote et al., 1960-68). The chief soils are red earthy sands in the interdune plains and corridors and red sands of the dunes which may cover some interdune areas (Northcote et al., 1960-68). The majority of the areas identified as being susceptible to erosion in the western half of the application area are associated with drainage tracts (Pringle et al., 1994). There are very few drainage lines in the eastern half of the application area, therefore, the risk of erosion in this section is not as great (GIS Database).

The maximum width of the construction right of way will be 30 metres (APA Group, 2014). Following construction the pipeline alignment will be completely rehabilitated apart from an access track and five small above ground facilities (APA Group, 2014). Given the narrow, linear nature of the proposed activities, the clearing is not likely to result in any appreciable land degradation. The implementation of a staged clearing condition will ensure that cleared areas are not left open for long periods and therefore, minimise the risk of erosion in areas that may be more susceptible.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology APA Group (2014)
Nortcote (1960-68)
Pringle et al. (1994)
GIS Database:
- Hydrograpy, linear
- Rangeland Land System Mapping
- Soils, Statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**
The application area does not lie within any conservation areas or Department of Parks and Wildlife managed lands (GIS Database). The Plumridge Lakes Nature Reserve is the nearest conservation area, located approximately 16 kilometres south-east of the eastern end of the application area (GIS Database). The proposed clearing will not impact on any ecological links to this Nature Reserve.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- DEC Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposal is not likely to be at variance to this Principle**
There are no permanent watercourses within the application area, however, it crosses a number of ephemeral drainage lines (GIS Database). The majority of these watercourses are associated with drainage into Lake Carey (GIS Database). Lake Carey is a hypersaline lake and the proposed clearing is not likely to impact on the quality of the water entering the lake (APA Group, 2014).

The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The groundwater quality in the application area varies greatly along the pipeline route. At the western end of the application area the groundwater quality starts at 500 milligrams per litre of Total Dissolved Solids (TDS) and increases to 35,000 milligrams per litre TDS in the eastern end of the application area (GIS Database). Areas near Lake Carey and Hope Campbell Lake have a TDS in excess of 35,000 milligrams per litre (GIS Database). The proposed clearing for the Eastern Goldfields Pipeline is not likely to significantly alter the groundwater quality in the local area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology APA Group (2014)
GIS Database:
- Groundwater Salinity, Statewide
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposal is not likely to be at variance to this Principle**
The proposed clearing is for a 30 metre wide corridor over a length of 294 kilometres (APA Group, 2014). The application area is relatively flat across its whole distance (GIS Database). Given this, the proposed clearing is unlikely to cause excessive levels of water runoff that would exacerbate the incidence or intensity of flooding in the local area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology APA Group (2014)
GIS Database:
- Topographic Contours, Statewide

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There are no Native Title Claims over the area under application (GIS Database). However, the mining tenure has been granted in accordance with the future act regime of the Native Title Act 1993 and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the Native Title Act 1993.

There are numerous registered Aboriginal Sites of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the Aboriginal Heritage Act 1972 and ensure that no Aboriginal sites of significance are damaged through the clearing process.

The proposed clearing impacts on a protected matter under the Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act). The proposal was referred to the (Federal) Department of the Environment by the proponent on 29 July 2014. The proposed activities were deemed not to be a controlled action under the EPBC Act on 25 August 2015.

The Eastern Goldfields Pipeline Project was referred to the (WA) Environmental Protection Authority by the proponent. On 3 November 2014 the EPA set the level of assessment as 'Not Assessed - Public Advice Given'.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 1 December 2014 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to the proposed clearing.

Methodology GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims - Determined by the Federal Court
- Native Title Claims - Filed at the Federal Court
- Native Title Claims - Registered with the NNTT

4. References

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5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
EPA	Environmental Protection Authority, Western Australia
EP Act	*Environmental Protection Act 1986*, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	*Rights in Water and Irrigation Act 1914*, Western Australia
s.17	Section 17 of *the Environment Protection Act 1986*, Western Australia

TEC Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T **Threatened species:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened Fauna and Flora are further recognised by DPaW according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.
EN: Endangered - considered to be facing a very high risk of extinction in the wild.
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

X **Presumed Extinct species:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).

IA **Migratory birds protected under an international agreement:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.

S **Other specially protected fauna:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P1 **Priority One - Poorly-known species:**
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

P2 **Priority Two - Poorly-known species:**
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

P3 **Priority Three - Poorly-known species:**
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

P4 **Priority Four - Rare, Near Threatened and other species in need of monitoring:**
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
(b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5 **Priority Five - Conservation Dependent species:**
Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.