Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6712/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Holcim (Australia) Pty Ltd**

1.3. Property details

Property: Mining Leases 45/277 and 45/530
Local Government Area: Town of Port Hedland
Colloquial name: Turner River Quarry Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
47		Mechanical Removal	Sand Mining

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 October 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. Two Beard vegetation associations have been mapped within the application area (GIS Database):

Beard vegetation association 589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex; and
Beard vegetation association 619: Medium woodland; river gum (*Eucalyptus camaldulensis*).

A level one flora and vegetation study incorporating a desktop assessment and a field component was undertaken in April 2015 by MWH Australia (2015). This survey identified six broad vegetation types within the application area:

EcMlTw: Low open woodland dominated by *Eucalyptus camaldulensis*, over tall sparse Shrubland dominated by *Melaleuca lasiandra*, over low sparse hummock grassland dominated by *Triodia wiseana;*

EcMa: Mid isolated trees of *Eucalyptus camaldulensis* with mid isolated clumps of mallee shrubs of *Melaleuca argentea* with over low sparse forbland of *Goodenia lamprosperma*, *Ptilotus fusiformis* and *Pluchea rubelliflora*, with mid isolated sedges of *Cyperus ixiocarpus*;

EcAtTe: Mid isolated trees of *Eucalyptus camaldulensis*, with mid isolated mallee trees of *Melaleuca argentea*, over mid to tall sparse shrubland dominated by *Acacia trachycarpa*, *Acacia pyrifolia* and *Triumfetta chaetocarpa* over low sparse hummock grassland of *Triodia epactia* and *Triodia wiseana*;

EcAtTw: Low isolated trees of *Eucalyptus camaldulensis*, over tall sparse shrubland of *Acacia tumida* over low hummock grassland dominated by *Triodia wiseana*;

AtAsTw: Tall isolated shrubs of *Acacia tumida*, over mid shrubland of *Acacia stellaticeps*, over low hummock grassland dominated by *Triodia wiseana;*

AtTcTw: Tall sparse shrubland of *Acacia tumida*, over mid sparse shrubland dominated by *Triumfetta chaetocarpa* and *Pimelea ammocharis* over low open hummock grassland dominated by *Triodia wiseana*.

Clearing Description

Turner River Quarry Project

Holcim Australia Pty Ltd proposes to clear up to 47 hectares of native vegetation within a total boundary area of approximately 47.01 hectares for the purpose of mineral production. The proposal is located approximately 35 kilometres south west of Port Hedland in the Town of Port Hedland.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);

To

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

Comment The vegetation condition was assessed by botanists from MWH Australia (2015).

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 not likely to be at variance to this Principle

The application area occurs within the Roebourne subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by quaternary alluvial and older colluvial coastal and subcoastal plains with a grass savannah of mixed bunch and hummock grasses, and dwarf shrub steppe of *Acacia stellaticeps* or *A. pyrifolia* and *A. inaequilatera*. Uplands are dominated by *Triodia* hummock grasslands and ephemeral drainage lines support *Eucalyptus victrix* or *Corymbia hamersleyana* woodlands. Samphire, *Sporobolus* and mangal occur on marine alluvial flats and river deltas (CALM, 2002).

A flora and vegetation survey of the application area was conducted in April 2015 (MWH Australia, 2015). The timing of the survey was considered not favourable as lower than average rainfall prior to the survey period meant that conditions were not optimal for the collection of annuals, cryptic perennials and ephemeral flora, and several taxa could not be confidently identified down to the subspecies and variant level (MWH Australia, 2015). The survey recorded a total of 37 taxa from 18 families, representing 30 genera (MWH Australia, 2015). MWH Australia (2015) identified six vegetation communities within the application area with the condition of the vegetation communities classified as 'excellent' to 'degraded' (Keighery, 1994).

There are no known Threatened Flora or Priority species, Threatened Ecological Communities or Priority Ecological Communities recorded within the application area (MWH Australia, 2015; GIS Database).

No Weeds of National Significance or Declared Pests under the *Biosecurity and Agricultural Management Act 2007* were recorded during the survey, however six introduced flora taxa were recorded. The proposed vegetation clearing has the potential to introduce weed species into the local area should adequate hygiene practices not be put in place. Weeds can affect biodiversity in a number of ways, including out competing native species for resources and increasing the fire risk. The potential spread of introduced species as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

A fauna survey undertaken by MWH Australia (2015A) in April 2015 identified four broad fauna habitats as being present within the application area. The faunal habitats within the application area are considered to be common and widespread within the subregion and faunal assemblages are unlikely to be different to that found in similar habitat located elsewhere in the region (MWH Australia, 2015A). The clearing of 47 hectares of native vegetation is unlikely to have a significant impact on faunal diversity in a regional and local context.

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

Methodology

CALM (2002)
Keighery (1994)
MWH Australia (2015)
MWH Australia (2015A)
GIS Database:
- IBRA WA (Regions - Sub Regions)
- Threatened and Priority Flora
- Threatened Ecological 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 not likely to be at variance to this Principle

A fauna survey was conducted over the application area in April 2015 by MWH Australia (2015A). Based off this survey, four broad fauna habitats were identified within the application area, these being:

Eucalypt woodland;
River bed;
Spinifex sand plain; and
Acacia Shrubland.

The faunal habitats within the application area are considered to be common and widespread within the subregion and faunal assemblages are unlikely to be different to that found in similar habitat located elsewhere in the region (MWH Australia, 2015A).

Fourteen vertebrate fauna species were identified by means of opportunistic sighting and targeted searching during the survey. One fauna taxon of conservation significance was recorded during the survey (MWH Australia, 2015A):

Rainbow Bee-eater (*Merops ornatus*) (Migratory, *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act); Schedule 3, *Wildlife Conservation Act 1950* (WC Act))

Based on the fauna habitat types present within the application area, an additional three species are considered to potentially occur within the application area (DPaW, 2015; MWH Australia, 2015A):

Australian Bustard (*Ardeotis australis*) (Priority 4);
Northern Quoll (*Dasyurus hallucatus*) (Endangered, EPBC Act; Schedule 1, WC Act);
Woma (*Aspidites ramsayi*) (Endangered, EPBC Act; Schedule 4, WC Act).

The Rainbow Bee-eater *(Merops ornatus)* is a breeding resident in northern Western Australia, migrating between Australia and north as far as Japan (Pizzey and Knight, 1998). It occupies numerous habitats including open woodlands with sandy loamy soil, sandridges, sandpits, riverbanks, road cuttings, beaches, dunes, cliffs, mangroves and rainforests (MWH Australia, 2015A).

The Woma occurs throughout arid zones of Australia with a disjunct population in the southwest of Western Australia that is now in severe decline, initiating the Schedule 4 listing of this species. The Pilbara is well outside of the northern limit of the species southwest distribution (MWH Australia, 2015A).

Northern Quoll habitat within the application area is not core/breeding habitat for the species, but it is likely that the Northern Quoll may disperse along the river associated habitats from time to time (MWH Australia, 2015A).

The Australian Bustard has a wide range across Australia, and is known to occur throughout the region over plains areas (MWH Australia, 2015A).

Based on their habitat preferences and ecology, the above listed species are not likely to depend on the application area as significant habitat. All habitats are widespread and well-represented within the Pilbara bioregion (MWH Australia, 2015A).

The proposed clearing of 47 hectares of native vegetation is not likely to impact critical feeding or breeding habitat for any conservation significant fauna species.

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

Methodology DPaW (2015)
MWH Australia, 2015A
Pizzey and Knight (2007)

(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 known records of Threatened Flora within the application area (GIS Database). A search of the Department of Environment and Conservation's Threatened and Priority Flora databases identified no Threatened Flora species as occurring within a 20 kilometre radius of the application area (DPaW, 2015).

MWH Australia (2015) conducted a level 1 vegetation and flora survey of the application area in April 2015. No Threatened Flora was recorded within the survey area.

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

Methodology DPaW (2015)
MWH Australia (2015)
GIS Database:
- Threatened and Priority Flora

(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**
A search of the available databases showed that there are no known Threatened Ecological Communities (TECs) situated within 100 kilometres of the application area (GIS Database).

The vegetation survey by MWH Australia (2015) did not record any TECs within the application area.

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

Methodology MWH Australia (2015)

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 lies within the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 99% of the pre-European vegetation remains (see table) (Government of Western Australia, 2014; GIS Database).

The vegetation in the application area is broadly mapped as Beard vegetation associations 589 and 619 (GIS Database):

589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex; and

619: Medium woodland; river gum (*Eucalyptus camaldulensis*).

These vegetation associations have not been extensively cleared as over 99% remains at a State, and 99% at a bioregional level for all vegetation associations (see table) (Government of Western Australia, 2015). There has not been extensive clearing in the local region and the vegetation within the application area is not a remnant nor does it form part of any remnants within the local area (GIS Database).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPAW Managed Lands
IBRA Bioregion - Pilbara	17,808,657	17,733,584	~99.58	Least Concern	~8.4
Beard vegetation associations - State					
589	807,699	802,713	~99.38	Least Concern	~1.59
619	119,374	118,205	~99.02	Depleted	~0.2
Beard vegetation associations - Bioregion					
589	728,768	724,696	~99.44	Least Concern	~1.77
619	118,920	118,117	~99.32	Least Concern	~0.2

* Government of Western Australia (2014)
** 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 (2014)
GIS Database:
- IBRA WA (regions – subregions)
- 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

According to available databases, a number of ephemeral drainage tracts transect the application area as well as the Turner River, which crosses through the application area (GIS Database). One of the vegetation communities mapped within the application area is associated with the Turner River and the ephemeral drainage tracts (MWH Australia, 2015; GIS Database):

EcMa: Mid isolated trees of *Eucalyptus camaldulensis* with mid isolated clumps of mallee shrubs of *Melaleuca argentea* with over low sparse forbland of *Goodenia lamprosperma*, *Ptilotus fusiformis* and *Pluchea rubelliflora*, with mid isolated sedges of *Cyperus ixiocarpus.*

The Turner River streamflow is ephemeral and associated with high rainfall events during December to April (MWH Australia, 2015; BoM, 2015; GIS Database). Holcim advises that clearing activities will be undertaken in line with commitments set out in their Notice of Intent for M45/277 and M45/530 and the Turner River Quarry Mine Closure Plan (MWH Australia, 2015). This includes:

- The River will be worked only during the dry season. The part of the river covered by the mining tenements contains no permanent pools or water holes;
- Native vegetation two metres in height or greater, measured from base of the vegetation will not be cleared;
- A buffer distance of at least two metres from the "drip line" of vegetation two metres in height or greater will be retained; No native vegetation will be removed from this area unless first approved by the CEO (of the DMP);
- The entire operation of excavation and screening will be carried out on the river bed within the confines of the river banks. No mining or stockpiling activity will be carried out on the flats above the river bank or on the banks of the River;
- The river banks at the point of entry to the River shall be battered and sloped to their natural state.

Using the above approach, the vegetation cleared within the application boundary is likely to be minimal. Further impacts to riparian vegetation in the application area may be minimised by the implementation of a restrictive clearing condition which will prevent the clearing of large trees from within the river.

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

Methodology BoM (2015)
MWH Australia (2015)
GIS Database:
- Geodata, Lakes
- Hydrography, linear

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

Comments **Proposal may be at variance to this Principle**
The application to clear for sand and shingle extraction is located within the River and Mallina land systems of the Pilbara region (GIS Database; Van Vreeswyk *et al*., 2004).

The majority of the application area falls within the River land system, which is characterised by broad sandy plains and major rivers supporting grassy Eucalypt woodlands, tussock grasslands and soft spinifex grasslands and susceptibility to erosion is high or very high if vegetative cover is removed (Van Vreeswyk *et al*., 2004).

The Mallina land system is characterised by sandy surfaced alluvial plains supporting soft spinifex (and occasionally hard spinifex) grasslands (Van Vreeswyk *et al*., 2004). Alluvial plains are moderately to highly susceptible to erosion if vegetative cover is seriously depleted (Van Vreeswyk *et al*., 2004).

Given that the land systems associated with the areas to be cleared have a moderate to high susceptibility to erosion when vegetation is removed there may be an increased risk of wind and water erosion associated with mining during heavy rainfall events. The excavation will disturb the ground but flooding will refill and rehabilitate these areas with sand deposits and replenish the seed source. Potential impacts from wind erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

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

Methodology Van Vreeswyk *et al*. (2004)
GIS Database:
- 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 is not located within any conservation areas or Department of Parks and Wildlife (DPaW) managed lands (GIS Database). The closest conservation area is the South West Creek Register of National Estate site which is situated approximately 28 kilometres north of the application area (GIS Database).

At this distance, it is not likely that the vegetation within the application area would act as a buffer or be important as an ecological linkage to this conservation area.

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

Methodology GIS Database:
- DPaW 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**
The application area is not located within a Public Drinking Water Source Area (GIS Database). The application

area is located within the proclaimed Pilbara groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

There are no permanent watercourses or water bodies within the application area (GIS Database). The Turner River crosses through the application area and a few ephemeral drainage tracts transect the application area (GIS Database). These drainage tracts are dry for most of the year and only flow and hold surface water for short durations following significant rainfall events during December to April (MWH Australia, 2015; GIS Database). Project activities are not expected to cause deterioration in the quality of surface or underground water as sand extraction is only undertaken when the creek bed is dry with any remaining standing water avoided (MWH Australia, 2015).

The application has a groundwater salinity that is saline (1,000 - 3,000 milligrams/Litre Total Dissolved Solids (TDS)) (GIS Database). The clearing of vegetation as a result of this proposal is therefore unlikely to result in any further deterioration in surface or groundwater quality in the local area.

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

Methodology

MWH Australia (2015)
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 application area experiences an arid (semi-desert) tropical climate with highly variable rainfall, falling mainly in summer, with an annual average rainfall of approximately 317 millimetres per year (CALM, 2002; BoM, 2015). Based on an average annual evaporation rate of 3,200 - 3,600 millimetres (BoM, 2015), any surface water resulting from rainfall events is likely to be relatively short lived.

Given the size of the area to be cleared (47 hectares) compared to the size of the Turner River catchment area (480,185 hectares) (GIS Database) it is not likely that the proposed clearing will lead to an appreciable increase in run off, and subsequently cause or exacerbate the incidence or intensity of flooding.

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

Methodology

BoM (2015)
CALM (2002)
GIS Database:
- Hydrographic Catchments - Catchments

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

Comments

There is one Native Title Claim (WC99/3) over the area under application (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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*.

According to available databases, there is one registered Aboriginal Site 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.

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 14 September 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology

DAA (2015)
GIS Database:
- Aboriginal Sites of Significance

4. References

BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics for Port Hedland, Australian Government Bureau of Meteorology, viewed 19 October 2015, <http://www.bom.gov.au/climate/averages/tables/cw_012038.shtml>.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.

DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, viewed 19 October 2015 < http://maps.dia.wa.gov.au/AHIS2/>.

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

DPaW (2015) NatureMap - Mapping Western Australia Biodiversity, Department of Parks and Wildlife, viewed 19 October 2015, < http://naturemap.dpaw.wa.gov.au/default.aspx>.

Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

MWH Australia (2015) Turner River Quarry Native Vegetation Clearing Permit Application for Tenements M45/530 and M45/277 M45/530 and M45/277. Supporting documentation prepared for Holcim Australia Pty Ltd, July 2015.

MWH Australia (2015A) Level 1 Flora and Fauna Assessment - Turner River Quarry Supporting documentation prepared for Holcim Australia Pty Ltd, August 2015.

Pizzey, G. and Knight, F. (2007) Pizzy and Knight - *Field Guide to the Birds of Australia, Eighth Edition.* Harper Collins Publishers, Sydney, NSW.

Van Vreeswyk, A.M.E.; Payne, A.L.; Leighton, K.A.; Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia, Technical Bulletin No. 92 Department of Agriculture Western Australia, South Perth.

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 the Department 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.