

Appendix 1

DBCA TPRF Forms



This is the content of the first appendix.

Appendix 2

DBCA TEC and PEC Forms



Appendix 3

Framework for Significance Rankings of Communities and Species in WA



A. Definitions, Categories and Criteria for Threatened and Priority Ecological Communities

Species and Communities Branch, Department of Environment and Conservation, December 2010.

1. General Definitions

Ecological Community

A naturally occurring biological assemblage that occurs in a particular type of habitat.

Note: The scale at which biological communities are defined will often depend on the level of detail in the information source, therefore no particular scale is specified.

A **threatened ecological community (TEC)** is one which is found to fit into one of the following categories; "presumed totally destroyed", "critically endangered", "endangered" or "vulnerable".

Possible threatened ecological communities that do not meet survey criteria are added to the Department of Parks and Wildlife's Priority Ecological Community Lists under Priorities 1, 2 and 3. Ecological Communities that are adequately known, are rare but not threatened, or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

An **assemblage** is a defined group of biological entities.

Habitat is defined as the areas in which an organism and/or assemblage of organisms lives. It includes the abiotic factors (e.g. substrate and topography), and the biotic factors.

Occurrence: a discrete example of an ecological community, separated from other examples of the same community by more than 20 metres of a different ecological community, an artificial surface or a totally destroyed community.

By ensuring that every discrete occurrence is recognised and recorded future changes in status can be readily monitored.

Adequately Surveyed is defined as follows:

"An ecological community that has been searched for thoroughly in most likely habitats, by relevant experts."

Community structure is defined as follows:

"The spatial organisation, construction and arrangement of the biological elements comprising a biological assemblage" (e.g. *Eucalyptus salmonophloia* woodland over scattered small shrubs over dense herbs; structure in a faunal assemblage could refer to trophic structure, e.g. dominance by feeders on detritus as distinct from feeders on live plants).

Definitions of **Modification** and **Destruction** of an ecological community:

Modification: "changes to some or all of ecological processes (including abiotic processes such as hydrology), species composition and community structure as a direct or indirect result of human activities. The level of damage involved could be ameliorated naturally or by human intervention."

Destruction: "modification such that reestablishment of ecological processes, species composition and community structure within the range of variability exhibited by the original community is unlikely within the foreseeable future even with positive human intervention."

Note: Modification and destruction are difficult concepts to quantify, and their application will be determined by scientific judgement. Examples of modification and total destruction are cited below:

Modification of ecological processes: The hydrology of Toolibin Lake has been altered by clearing of the catchment such that death of some of the original flora has occurred due to dependence on fresh water. The system may be bought back to a semblance of the original state by redirecting saline runoff and pumping waters of the rising underground watertable away to restore the hydrological balance. Total destruction of downstream lakes has occurred due to hydrology being altered to the point that few of the original flora or fauna species are able to tolerate the level of salinity and/or water logging.

Modification of structure: The understorey of a plant community may be altered by weed invasion due to nutrient enrichment by addition of fertiliser. Should the additional nutrients be removed from the system the balance may be restored, and the original plant species better able to compete. Total destruction may occur if additional nutrients continue to be added to the system causing the understorey to be completely replaced by weed species, and death of overstorey species due to inability to tolerate high nutrient levels.

Modification of species composition: Pollution may cause alteration of the invertebrate species present in a freshwater lake. Removal of pollutants may allow the return of the original inhabitant species. Addition of residual highly toxic substances may cause permanent changes to water quality, and total destruction of the community.

Threatening processes are defined as follows:

“Any process or activity that threatens to destroy or significantly modify the ecological community and/or affect the continuing evolutionary processes within any ecological community.”

Examples of some of the continuing threatening processes in Western Australia include: general pollution; competition, predation and change induced in ecological communities as a result of introduced animals; competition and displacement of native plants by introduced species; hydrological changes; inappropriate fire regimes; diseases resulting from introduced micro-organisms; direct human exploitation and disturbance of ecological communities.

Restoration is defined as returning an ecological community to its pre-disturbance or natural state in terms of abiotic conditions, community structure and species composition.

Rehabilitation is defined as the re-establishment of ecological attributes in a damaged ecological community although the community will remain modified.

2. Definitions and Criteria for Presumed Totally Destroyed, Critically Endangered, Endangered and Vulnerable Ecological Communities

ECOLOGICAL COMMUNITIES

Presumed Totally Destroyed (PD)

An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future.

An ecological community will be listed as presumed totally destroyed if there are no recent records of the community being extant and either of the following applies (A or B):

- A) Records within the last 50 years have not been confirmed despite thorough searches of known or likely habitats or
- B) All occurrences recorded within the last 50 years have since been destroyed

Critically Endangered (CR)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.

An ecological community will be listed as Critically Endangered when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future. This will be determined on the basis of the best available information, by it meeting any one or more of the following criteria (A, B or C):

- A) The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 90% and either or both of the following apply (i or ii):
 - i) geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is imminent (within approximately 10 years);
 - ii) modification throughout its range is continuing such that in the immediate future (within approximately 10 years) the community is unlikely to be capable of being substantially rehabilitated.
- B) Current distribution is limited, and one or more of the following apply (i, ii or iii):

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- i) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the immediate future (within approximately 10 years);
 - ii) there are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes;
 - iii) there may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes.
- C) The ecological community exists only as highly modified occurrences that may be capable of being rehabilitated if such work begins in the immediate future (within approximately 10 years).

Endangered (EN)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

An ecological community will be listed as Endangered when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. This will be determined on the basis of the best available information by it meeting any one or more of the following criteria (A, B, or C):

- A) The geographic range, and/or total area occupied, and/or number of discrete occurrences have been reduced by at least 70% since European settlement and either or both of the following apply (i or ii):
 - i) the estimated geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is likely in the short term future (within approximately 20 years);
 - ii) modification throughout its range is continuing such that in the short term future (within approximately 20 years) the community is unlikely to be capable of being substantially restored or rehabilitated.
- B) Current distribution is limited, and one or more of the following apply (i, ii or iii):
 - i) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the short term future (within approximately 20 years);
 - ii) there are few occurrences, each of which is small and/or isolated and all or most occurrences are very vulnerable to known threatening processes;
 - iii) there may be many occurrences but total area is small and all or most occurrences are small and/or isolated and very vulnerable to known threatening processes.
- C) The ecological community exists only as very modified occurrences that may be capable of being substantially restored or rehabilitated if such work begins in the short-term future (within approximately 20 years).

Vulnerable (VU)

An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.

An ecological community will be listed as Vulnerable when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing a high risk of total destruction or significant modification in the medium to long-term future. This will be determined on the basis of the best available information by it meeting any one or more of the following criteria (A, B or C):

- A) The ecological community exists largely as modified occurrences that are likely to be capable of being substantially restored or rehabilitated.
 - B) The ecological community may already be modified and would be vulnerable to threatening processes, is restricted in area and/or range and/or is only found at a few locations.
 - C) The ecological community may be still widespread but is believed likely to move into a category of higher threat in the medium to long term future because of existing or impending threatening processes.
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3. Definitions and Criteria for Priority Ecological Communities

PRIORITY ECOLOGICAL COMMUNITY LIST

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community Lists under Priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community, and evaluation of conservation status, so that consideration can be given to their declaration as threatened ecological communities. Ecological Communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

Priority One: Poorly-known ecological communities

Ecological communities with apparently few, small occurrences, all or most not actively managed for conservation (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) and for which current threats exist. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority Two: Poorly-known ecological communities

Communities that are known from few small occurrences, all or most of which are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc.) and not under imminent threat of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority Three: Poorly known ecological communities

- (i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or;
- (ii) communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or;
- (iii) communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Priority Four: Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.

- (a) Rare. Ecological communities known from few occurrences 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 communities are usually represented on conservation lands.
- (b) Near Threatened. Ecological communities 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) Ecological communities that have been removed from the list of threatened communities during the past five years.

Priority Five: Conservation Dependent ecological communities

Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

B. Categories for Flora and Fauna Species

1. Western Australian Biodiversity Conservation Act 2016, and Priority Species Classification

In Western Australia, 'Threatened', 'Extinct' and 'Specially Protected' fauna and flora species are protected under the *Biodiversity Conservation Act 2016* (the BC Act), making it an offence to take or disturb these species without Ministerial approval. The definition of 'take' is broad, and includes killing, injuring, harvesting or capturing fauna, and gathering, cutting, destroying, harvesting or damaging flora.

Such species are classified within a framework of several categories.

Species of the highest conservation significance are designated as Threatened species and are protected under sections 19(1)(a), 19(1)(b) and 19(1)(c) of the BC Act. Species are listed within one of three categories:

- Critically endangered (CR), Endangered (EN), or Vulnerable (V), representing those species listed in Schedules 1 to 3 respectively of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* or the *Wildlife Conservation (Rare Flora) Notice 2018*.

Presumed extinct species are protected under sections 24 and 25 of the BC Act and are listed in one of two categories:

- Extinct (EX), representing those species listed in Schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* or the *Wildlife Conservation (Rare Flora) Notice 2018*; or
- Extinct in the wild (EW); there are currently no listed species under this category.

Specially protected species are protected under section 13(1) of the BC Act, and include species of special conservation interest, migratory species, cetaceans, species subject to international agreement, or species otherwise in need of special protection. Of these:

- Migratory species (MI) are those listed under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*;
- Species of special conservation interest (conservation dependent fauna) (CD) are those listed under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*; and
- Other specially protected fauna (OS) are those listed under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*;

In addition to the species formally designated as protected under the BC Act, the WA Department of Biodiversity, Conservation and Attractions (DBCA) also maintains a list of 'Priority species'.

Species that appear to be rare or threatened, but for which there is insufficient information to properly evaluate their conservation significance, are assigned to one of three Priority categories (Priority 1 to Priority 3), while species that are adequately known but require regular monitoring are assigned to Priority 4.

Note that of the above classifications, only 'Threatened', 'Extinct' and 'Specially Protected' species have statutory standing. The Priority flora and fauna classifications are employed by the WA DBCA to manage and classify their database of species considered potentially rare or at risk, but these categories have no legislative status.

Further explanations of the categories is provided in more detail in the following pages.



CONSERVATION CODES

For Western Australian Flora and Fauna

Threatened, Extinct and Specially Protected fauna or flora¹ are species² which have been adequately searched for and are deemed to be, in the wild, threatened, extinct or in need of special protection, and have been gazetted as such.

The *Wildlife Conservation (Specially Protected Fauna) Notice 2018* and the *Wildlife Conservation (Rare Flora) Notice 2018* have been transitioned under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018* to be the lists of Threatened, Extinct and Specially Protected species under Part 2 of the *Biodiversity Conservation Act 2016*.

Categories of Threatened, Extinct and Specially Protected fauna and flora are:

T **Threatened species**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR **Critically endangered species**

Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN **Endangered species**

Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU **Vulnerable species**

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

EX Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P **Priority species**

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

1 **Priority 1: Poorly-known species**

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

2 **Priority 2: Poorly-known species**

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

3 **Priority 3: Poorly-known species**

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

4 **Priority 4: 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 are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

¹ The definition of flora includes algae, fungi and lichens

² Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

2. Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

Many of the species that are specially protected at State level are also listed as Threatened species at the Federal level, as one of the Matters of National Environmental Significance (MNES) identified under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). These may be classified as 'critically endangered', 'endangered', 'vulnerable' or 'lower risk', consistent with IUCN categories:

1. **Critically Endangered (CR):** a taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future.
2. **Endangered (EN):** a taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future.
3. **Vulnerable (VU):** a taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future.
4. **Lower Risk (LR):** a taxon is Lower Risk when it has been evaluated, does not satisfy the criteria for any of the categories Critically Endangered, Endangered or Vulnerable. Taxa included in the Lower Risk category can be separated into three subcategories:
 - **Conservation Dependent (CD).** Taxa which are the focus of a continuing taxon-specific or habitat-specific conservation program targeted towards the taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened categories above within a period of five years.
 - **Near Threatened (NT).** Taxa which do not qualify for Conservation Dependent, but which are close to qualifying for Vulnerable.
 - **Least Concern (LC).** Taxa which do not qualify for Conservation Dependent or Near Threatened.

In addition, numerous Migratory species are listed as MNES under the EPBC Act (some of which are also listed as Threatened). Migratory species are those animals that migrate to Australia and its external territories, or pass through or over Australian waters during their annual migrations. The list of migratory species consists of those species listed under the following international conventions:

1. Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
2. China-Australia Migratory Bird Agreement (CAMBA);
3. Japan-Australia Migratory Bird Agreement (JAMBA); and,
4. Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).

Marine species are also protected under the EPBC Act, and are listed to ensure the long-term conservation of the species. Marine species include all Australian sea snakes, seals, crocodiles, dugongs, marine turtles, seahorses and seabirds that naturally occur in the Commonwealth marine area.

Under the terms of the EPBC Act, an action (e.g. a project or development) is required to be referred to the Australian Government Environment Minister for approval if it has, will have, or is likely to have, a significant impact on an MNES. The term 'action' includes projects and developments subsequent to commencement of the Act, however there are a number of exemptions (e.g. projects in Commonwealth areas). According to Department of the Environment (2013), a 'significant impact' is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.

References:

Department of the Environment (2013). Matters of National Environmental Significance - Significant Impact Guidelines 1.1 *Environment Protection and Biodiversity Conservation Act 1999*. Department of the Environment, Canberra, Australia.

Appendix 4

Likelihood of Significant Flora Occurring in the Survey Area



Taxon	Habit ^a	Habitat ^a	Database Searches							Likelihood of Occurrence		
			NatureMap	Gibson 1994 SCP	WAHerb (MRWA)	TPFL (MRWA)	Bush Forever (WAPC 2000)	EPBC PMST	Previous Surveys	Initial Ranking Based on Desktop Study	Final Ranking Including Results of 2022 Field Survey	
Threatened												
<i>Andersonia gracilis</i>	Slender erect or open straggly shrub, 0.1-0.5(-1) m high. Fl. white to pink to purple.	White/grey sand, sandy clay, gravelly loam. Winter-wet areas, near swamps.							✓		Would not occur; areas of suitable habitat present, however no records in locality.	Would not occur.
<i>Caladenia huegelii</i>	Tuberous, perennial, herb, 0.25-0.6 m high. Fl. green & cream & red.	Grey or brown sand, clay loam.	✓			✓			✓	✓	Likely to occur; suitable habitat; previously recorded within survey area.	May potentially occur; suitable habitat; records within 5 km; as discussed, orchids can stay dormant for up to 3 years.
<i>Diuris drummondii</i>	Tuberous, perennial, herb, 0.5-1.05 m high. Fl. yellow.	Low-lying depressions, swamps.							✓		Unlikely to occur; areas of suitable habitat present, however no records in locality.	Would not occur.
<i>Diuris micrantha</i>	Tuberous, perennial, herb, 0.3-0.6 m high.	Brown loamy clay. Winter-wet swamps, in shallow water.	✓		✓	✓			✓		Likely to occur; suitable habitat; records within 5 km.	May potentially occur; suitable habitat; records within 5 km; as discussed, orchids can stay dormant for up to 3 years.
<i>Diuris purdiei</i>	Tuberous, perennial, herb, 0.15-0.35 m high.	Grey-black sand, moist. Winter-wet swamps.	✓		✓	✓			✓		Likely to occur; suitable habitat; record within 1 km of survey area.	May potentially occur; suitable habitat; records within 1 km; as discussed, orchids can stay dormant for up to 3 years.
<i>Drakaea elastica</i>	Tuberous, perennial, herb, 0.12-0.3 m high.	White or grey sand. Low-lying situations adjoining winter-wet swamps.	✓		✓	✓			✓		Likely to occur; suitable habitat; previously recorded within the contextual area.	May potentially occur; suitable habitat; records within contextual area; as discussed, orchids can stay dormant for up to 3 years.
<i>Drakaea micrantha</i>	Tuberous, perennial, herb, 0.15-0.3 m high	White-grey sand.							✓		Unlikely to occur; areas of suitable habitat present, however no records in locality.	Would not occur.
<i>Eleocharis keigheryi</i>	Rhizomatous, clumped perennial, grass-like or herb (sedge), to 0.4 m high	Clay, sandy loam. Emergent in freshwater creeks, claypans.							✓		Would not occur; no/minimal areas of suitable habitat and no records in proximity.	Would not occur.
<i>Eucalyptus ×balanites</i>	(Mallee), to 5 m high, bark rough, flaky.	Sandy soils with lateritic gravel.							✓		Unlikely to occur; no suitable habitat; however no records in locality.	Would not occur.
<i>Grevillea curviloba</i> *	Prostrate to erect shrub, 0.1-2.5 m high. Fl. white-cream.	Grey sand, sandy loam.							✓		Unlikely to occur; areas of suitable habitat present, however no records in locality.	Would not occur.
<i>Lepidosperma rostratum</i>	Rhizomatous, tufted perennial, grass-like or herb (sedge), 0.5 m high. Fl. brown.	Peaty sand, clay.							✓		Unlikely to occur; areas of suitable habitat present, however no records in locality.	Would not occur.
<i>Synaphea</i> sp. Fairbridge Farm (D. Papenfus 696)	Dense, clumped shrub, to 0.3 m high, to 0.4 m wide.	Sandy with lateritic pebbles. Near winter-wet flats, in low woodland with weedy grasses.							✓		Unlikely to occur; areas of suitable habitat present, however no records in locality.	Would not occur.
<i>Synaphea</i> sp. Pinjarra Plain (A.S. George 17182)	Erect, clumped shrub (sub-shrub), to 0.8 m high. Fl. Yellow.	Grey sandy loam or clay, grey-brown clayey sand, brown clayey loam, laterite. Flats, seasonally wet areas, railroad reserves often with wet depressions or drains.							✓		May potentially occur; suitable habitat present; record within 5 km of survey area.	Unlikely to occur; given survey effort.
<i>Synaphea</i> sp. Serpentine (G.R. Brand 103)	perennial, erect, clumped shrub to 60cm high by 50cm wide with yellow flowers borne on long spikes well above the leaves.	Grey-brown sandy loams or clay in seasonally wet areas.	✓		✓	✓			✓		May potentially occur; suitable habitat present; records within 5 km of survey area.	Unlikely to occur; given survey effort.
Priority 2												
<i>Tetralia</i> sp. Chandala (G.J. Keighery 17055)	Perennial, tufted, erect sedge. 70 cm.	Winter-wet, low-lying areas. Eucalyptus rudis/Melaleuca spp. woodland over sedges.	✓		✓						May potentially occur; suitable habitat; one record from 2010 within 5 km.	Unlikely to occur; given survey effort.
Priority 3												
<i>Austrostipa mundula</i>	Perennial tufted grass, ca. 70 cm tall.	Grey sand.	✓		✓						May potentially occur; suitable habitat present; records within 5 km of survey area.	Unlikely to occur; given survey effort.

Taxon	Habit ^a	Habitat ^a	Database Searches							Likelihood of Occurrence	
			NatureMap	Gibson 1994 SCP	WAHerb (MRWA)	TPFL (MRWA)	Bush Forever (WAPC 2000)	EPBC PMST	Previous Surveys	Initial Ranking Based on Desktop Study	Final Ranking Including Results of 2022 Field Survey
<i>Cyathochaeta teretifolia</i>	Rhizomatous, clumped, robust perennial, grass-like or herb (sedge), to 2 m high, to 1.0 m wide. Fl. brown.	Grey sand, sandy clay. Swamps, creek edges.	✓			✓				May potentially occur; areas of suitable habitat; records within 1 km of the survey area.	Unlikely to occur; given survey effort.
<i>Hibbertia leptotheca</i> (previously <i>Hibbertia stricta</i> subsp. <i>leptotheca</i>)	Small, spreading shrubs to 0.3 m high (Thiele 2019).	Occurs in coastal and near-coastal sites, growing in sand over limestone in coastal heaths and thickets usually dominated by species of <i>Melaleuca</i> and <i>Acacia</i> (Thiele 2019).	✓	✓						May potentially occur; suitable habitat; no records within proximity.	Unlikely to occur; given survey effort.
<i>Jacksonia gracillima</i>	Prostrate, spreading or scrambling, shrub, spindly shrub	Banksia woodland (emergent <i>Corymbia/Eucalyptus</i>) with occasional myrtaceous scrub.	✓		✓				✓	Likely to occur; very suitable habitat; records within <1 km.	Recorded.
<i>Pimelea calcicola</i>	Erect to spreading shrub, 0.2-1 m high. Fl. Pink.	Sand. Coastal limestone ridges.	✓	✓	✓					May potentially occur; areas of suitable habitat; records within 5 km of the survey area.	Unlikely to occur; given survey effort.
<i>Pithocarpa corymbulosa</i>	Erect to scrambling perennial, herb, 0.5-1 m high.	Gravelly or sandy loam. Amongst granite outcrops.	✓	✓						Unlikely to occur; limited suitable habitat; no records within proximity.	Would not occur.
<i>Stylidium paludicola</i>	Reed-like perennial, herb, 0.35-1 m high. Inflorescence racemose. Fl. Pink.	Peaty sand over clay. Winter wet habitats. Marri and <i>Melaleuca</i> woodland, <i>Melaleuca</i> shrubland.	✓		✓					Likely to occur; minimal suitable habitat; records within 1 km.	Unlikely to occur; given survey effort.
Priority 4											
<i>Aponogeton hexatepalus</i>	Rhizomatous or cormous, aquatic perennial, herb, leaves floating. Fl. green-white	Mud. Freshwater: ponds, rivers, claypans.	✓			✓				Unlikely to occur; no suitable habitat; records within 5 km.	Unlikely to occur; no suitable habitat; records within 5 km.
<i>Dodonaea hackettiana</i>	Erect shrub or tree, 1-5 m high. Fl. yellow-green/red.	Sand. Outcropping limestone.	✓			✓	✓			May potentially occur; few areas of suitable habitat; records within 1 km.	Unlikely to occur; given survey effort
<i>Stylidium ireneae</i>	Lax perennial, herb, (0.06-)0.1-0.28 m high, leaves oblanceolate, 0.4-2 cm long, 1-3 (-5) mm wide, apex subacute to acuminate, margin entire, glandular. Scape glandular. Inflorescence racemose. Fl. pink.	Sandy loam. Valleys near creek lines, woodland, often with <i>Agonis</i>	✓		✓					Unlikely to occur; no suitable habitat; records within 5 km.	Unlikely to occur; no suitable habitat; records within 5 km.
<i>Stylidium striatum</i>	Rosetted perennial, herb, 0.15-0.55 m high,	Brown clay loam over laterite. Hillslopes. Jarrah/Marri forest, Wandoo woodland.	✓		✓					Unlikely to occur; no/minimal areas of suitable habitat; records within 5 km.	Unlikely to occur; no/minimal areas of suitable habitat; records within 5 km.
<i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>	Erect shrub, 0.2-0.75 m high. Fl. pink.	Sand, sandy clay. Winter-wet depressions.	✓			✓				May potentially occur; areas of suitable habitat; records within 5 km.	Unlikely to occur; given survey effort

All habit and habitat information taken from FloraBase (<http://florabase.dpaw.wa.gov.au>) unless referenced otherwise.

(Rye 2015) – A revision of the south-western Australian genus *Babingtonia* (Myrtaceae: Chamelaucieae).

(Focused Vision 2020) – Flora and Vegetation Review, Lot 9103 Warton Road, Piara Waters.

(GHD 2017) – Rowley, Anketell and Thomas Roads Planning Assessment - Flora and Fauna Assessment'.

(Thiele 2019) – Thiele, K.R. The *Hibbertia polystachya*-*H. spicata* (Dilleniaceae) species group in Western Australia. *Nuytsia* 30: 291–308.

WA Planning Commission (2000) – Bush Forever Volume 2: Directory of Bush Forever Sites. Government of Western Australia, Department of Environmental Protection, Perth.

Appendix 5

Vegetation Structural Classification and Condition Ranking



Vegetation Structural Classes*

Stratum	Canopy Cover (%)				
	70-100%	30-70%	10-30%	2-10%	<2%
Trees over 30 m	Tall closed forest	Tall open forest	Tall woodland	Tall open woodland	Scattered tall trees
Trees 10-30 m	Closed forest	Open forest	Woodland	Open woodland	Scattered trees
Trees under 10 m	Low closed forest	Low open forest	Low woodland	Low open woodland	Scattered low trees
Tree Mallee	Closed tree mallee	Tree mallee	Open tree mallee	Very open tree mallee	Scattered tree mallee
Shrub Mallee	Closed shrub mallee	Shrub mallee	Open shrub mallee	Very open shrub mallee	Scattered shrub mallee
Shrubs over 2 m	Tall closed scrub	Tall open scrub	Tall shrubland	Tall open shrubland	Scattered tall shrubs
Shrubs 1-2 m	Closed heath	Open heath	Shrubland	Open shrubland	Scattered shrubs
Shrubs under 1 m	Low closed heath	Low open heath	Low shrubland	Low open shrubland	Scattered low shrubs
Hummock grasses	Closed hummock grassland	Hummock grassland	Open hummock grassland	Very open hummock grassland	Scattered hummock grasses
Grasses, Sedges, Herbs	Closed tussock grassland / bunch grassland / sedgeland / herbland	Tussock grassland / bunch grassland / sedgeland / herbland	Open tussock grassland / bunch grassland / sedgeland / herbland	Very open tussock grassland / bunch grassland / sedgeland / herbland	Scattered tussock grasses / bunch grasses / sedges / herbs

- Based on Keighery (1994), adapted from Muir (1977), and Aplin's (1979) modification of the vegetation classification system of Specht (1970):
 - Keighery B.J. (1994). *Bushland Plant Survey: A Guide for Community Surveys*. Wildflower Society of Western Australia, Perth WA;
 - Aplin T.E.H. (1979). The Flora. Chapter 3 In O'Brien, B.J. (ed.) (1979). *Environment and Science*. University of Western Australia Press;
 - Muir B.G. (1977). Biological Survey of the Western Australian Wheatbelt. Part II: Vegetation and habitat of Bending Reserve. *Records of the Western Australian Museum, Suppl. No. 3*;
 - Specht R.L. (1970). Vegetation. In *The Australian Environment*. 4th edn (Ed. G.W. Leeper). Melbourne.

Extracts from the NVIS framework (1990) of relevance to the current study.

Table 1: The NVIS Information Hierarchy.

Hierarchical Level	Description	NVIS structural/floristic components required
I	Class*	Dominant growth form for the ecologically or structurally dominant stratum
II	Structural Formation*	Dominant growth form, cover and height for the ecologically or structurally dominant stratum.
III	Broad Floristic Formation**	Dominant growth form, cover, height and dominant land cover genus for the upper most or the ecologically or structurally dominant stratum.
IV	Sub-Formation**	Dominant growth form, cover, height and dominant genus for each of the three traditional strata. (i.e. Upper, Mid and Ground)
V	Association**	Dominant growth form, height, cover and species (3 species) for the three traditional strata. (i.e. Upper, Mid and Ground)
VI	Sub-Association**	Dominant growth form, height, cover and species (5 species) for all layers/sub-strata.

* Walker & Hopkins (2016a)

** NVIS (defined for the NVIS Information Hierarchy)

Table 4: NVIS structural Formation Terminology.

		Cover Characteristics						
	Foliage cover *	70-100	30-70	10-30		» 0	0-5	unknown
	Crown cover **	>80	50-80	20-50	0.25-20		0-5	unknown
	% Cover ***	>80	50-80	20-50	0.25-20		0-5	unknown
	Cover code	d	c	i	r	bi	bc	unknown
Growth Form	Height Ranges (m)	Structural Formation Classes						
tree, palm	30	closed forest	open forest	woodland	open woodland	isolated trees	isolated clumps of trees	trees
shrub, cycad, grass-tree, tree-fern	2	closed shrubland	shrubland	open shrubland	sparse shrubland	isolated shrubs	isolated clumps of shrubs	shrubs
heath shrub	2	closed heathland	heathland	open heathland	sparse heathland	isolated heath shrubs	isolated clumps of heath shrubs	heath shrubs
tussock grass	0.5	closed tussock grassland	tussock grassland	open tussock grassland	sparse tussock grassland	isolated tussock grasses	isolated clumps of tussock grasses	tussock grasses
other grass	0.5	closed grassland	grassland	open grassland	sparse grassland	isolated grasses	isolated clumps of grasses	other grasses
sedge	0.5	closed sedgeland	sedgeland	open sedgeland	sparse sedgeland	isolated sedges	isolated clumps of sedges	sedges
rush	0.5	closed rushland	rushland	open rushland	sparse rushland	isolated rushes	isolated clumps of rushes	rushes
forb	0.5	closed forbland	forbland	open forbland	sparse forbland	isolated forbs	isolated clumps of forbs	forbs
fern	2	closed fernland	fernland	open fernland	sparse fernland	isolated ferns	isolated clumps of ferns	ferns
vine	30	closed vineland	vineland	open vineland	sparse vineland	isolated vines	isolated clumps of vines	vines

* Foliage Cover is defined for each stratum as 'the proportion of the ground that would be shaded if sunshine came from directly overhead'. It includes branches and leaves and is similar to the Crown type of Walker & Hopkins (1990) but is applied to a stratum or plot rather than an individual crown. It is generally not directly measured in the field for the upper stratum, although it can be measured by various line interception methods for ground layer vegetation. For the attribute COVER CODE in the Stratum table, the ground cover category refers to ground foliage cover not percentage cover.

** Crown Cover (canopy cover) as per Walker & Hopkins (1990). Although relationships between the two are dependent on season, species, species age etc (Walker & Hopkins (1990), the crown cover category classes have been adopted as the defining measure.

*** The percentage cover is defined as the percentage of a strictly defined plot area, covered by vegetation. This can be an estimate and is a less precise measure than using, for example, a point intercept transect methods on ground layer, or overstorey vegetative cover. That is for precisely measured values (e.g. crown densitometer or point intercept transects) the value measured would be 'foliage' cover. Where less precise or qualitative measures are used these will most probably be recorded as 'percentage' cover.

Table 6: Example usage of the NVIS Information Hierarchy (Note: For definitions of U, M, G, U1, U2, U3, M1, M2, M3, G1, and G2 refer to Table 1.)**

Level	Description	Species	Growth form	Cover	Height
I	CLASS	-	1 dominant growth form for the dominant stratum	-	-
	Example	<i>Tree</i>			
II	STRUCTURAL FORMATION	-	1 dominant growth form for the dominant stratum	1 cover class for the dominant stratum	1 height class for the dominant stratum
	Example	<i>Open woodland</i>			
III	BROAD FLORISTIC FORMATION	1 dominant genus name for the dominant stratum	1 dominant growth form for dominant stratum	1 cover class for dominant stratum	1 height class for dominant stratum
	Example	<i>Eucalyptus open woodland</i>			
IV	SUB-FORMATION	1 dominant genus name for each stratum ((max 3 strata; i.e. for U, M, G where substantially present)	1 dominant growth form for each stratum (max 3 strata)	1 cover class for each stratum (max 3 strata)	1 height class for each stratum (max 3 strata)
	Example	<i>+Eucalyptus open woodland\Acacia tall sparse shrubland\Aristida open tussock grassland</i>			
V	ASSOCIATION	Up to 3 dominant species for each stratum (max 3 strata; i.e. for U, M, G where present)	Up to 3 dominant growth forms for each stratum (max 3 strata; i.e. for U, M, G where present)	1 cover class code for each stratum (max 3 strata; i.e. for U, M, G where present)	1 height class code for each stratum (max 3 strata; i.e. for U, M, G where present)
	Example	<i>U+ ^Eucalyptus coolabah,Casuarina cristata,Flindersia maculosa\^tree\7r;M ^Acacia salicina,Alectryon oleifolius,Acacia stenophylla\^shrub\4r;G ^Aristida ramosa,Astrebla squarrosa,Bothriochloa decipiens\^tussock grass,forb,sedge\2i</i>			
VI	SUB-ASSOCIATION	Up to 5 dominant species for each sub-stratum (i.e. for U1, U2, U3, M1, M2, M3, G1, G2 where present) <ul style="list-style-type: none"> Indicate characteristic genus in each sub-stratum with an up arrow or hat "^". Must match characteristic growth form. 	Up to 5 dominant growth forms for each sub-stratum. <ul style="list-style-type: none"> Indicate characteristic growth form with an up arrow or hat "^". Must match characteristic genus 	1 cover class code for each sub-stratum	1 height class code for each sub-stratum
	Example	<i>U1+ ^Eucalyptus coolabah,Casuarina cristata,Flindersia maculosa\Eucalyptus\^tree\7r;M1 ^Acacia salicina,Alectryon oleifolius ,Acacia stenophylla,Acacia victoriae subsp. victoriae,Eremophila bignoniiflora\Acacia\^shrub\4\bi;M2 Eremophila longifolia,Muehlenbeckia florulenta\Eremophila\shrub\3r;G1 ^Aristida ramosa,Astrebla squarrosa,Bothriochloa decipiens,Dichanthium sericeum,Enteropogon acicularis\Aristida\^tussock grass,forb,sedge\2\</i>			

Vegetation condition scale taken from EPA (1994), based on scales developed by Keighery (1988) and Trudgen (1988).

Vegetation Condition	South West and Interzone Botanical Provinces	Eremaean and Northern Botanical Provinces
Pristine	Pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.	
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor		Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix 6

Flora Sampling Site Coordinates



SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
ANK01	1	WGS84	385516	6435622
	2	WGS84	385508	6435628
	3	WGS84	385502	6435618
	4	WGS84	385511	6435613
ANK02	1	WGS84	385449	6435739
	2	WGS84	385441	6435747
	3	WGS84	385448	6435754
	4	WGS84	385457	6435747
ANK05	1	WGS84	385657	6435591
	2	WGS84	385649	6435595
	3	WGS84	385652	6435603
	4	WGS84	385661	6435599
ANK06	1	WGS84	385745	6435716
	2	WGS84	385755	6435715
	3	WGS84	385754	6435707
	4	WGS84	385744	6435708
ANK07	1	WGS84	385880	6435768
	2	WGS84	385881	6435759
	3	WGS84	385892	6435760
	4	WGS84	385890	6435769
ANK08	1	WGS84	386141	6435764
	2	WGS84	386148	6435758
	3	WGS84	386142	6435750
	4	WGS84	386135	6435755
ANK09	1	WGS84	386441	6435798
	2	WGS84	386432	6435801
	3	WGS84	386431	6435791
	4	WGS84	386439	6435789
ANK10	1	WGS84	386714	6435658
	2	WGS84	386704	6435654
	3	WGS84	386700	6435663
	4	WGS84	386709	6435666
ANK100	1	WGS84	385859	6435862
	2	WGS84	385866	6435863
	3	WGS84	385865	6435871
	4	WGS84	385857	6435869
ANK11	1	WGS84	386717	6435808
	2	WGS84	386709	6435801
	3	WGS84	386715	6435795
	4	WGS84	386722	6435801
ANK12	1	WGS84	386873	6435630
	2	WGS84	386868	6435623
	3	WGS84	386859	6435630

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	386865	6435638
ANK14	1	WGS84	387522	6435455
	2	WGS84	387529	6435463
	3	WGS84	387538	6435459
	4	WGS84	387532	6435447
ANK15	1	WGS84	387745	6435458
	2	WGS84	387747	6435449
	3	WGS84	387755	6435448
	4	WGS84	387756	6435457
ANK16	1	WGS84	387935	6435456
	2	WGS84	387937	6435468
	3	WGS84	387948	6435461
	4	WGS84	387946	6435452
ANK17	1	WGS84	388176	6435464
	2	WGS84	388184	6435467
	3	WGS84	388182	6435457
	4	WGS84	388173	6435458
ANK18	1	WGS84	388477	6435472
	2	WGS84	388476	6435464
	3	WGS84	388467	6435465
	4	WGS84	388468	6435474
ANK19	1	WGS84	388845	6435463
	2	WGS84	388836	6435462
	3	WGS84	388835	6435471
	4	WGS84	388845	6435471
ANK20	1	WGS84	389347	6435477
	2	WGS84	389337	6435478
	3	WGS84	389337	6435470
	4	WGS84	389347	6435469
ANK21	1	WGS84	389623	6435488
	2	WGS84	389632	6435484
	3	WGS84	389628	6435474
	4	WGS84	389619	6435478
ANK22	1	WGS84	389897	6435596
	2	WGS84	389890	6435592
	3	WGS84	389894	6435604
	4	WGS84	389887	6435602
ANK23	1	WGS84	390083	6435709
	2	WGS84	390075	6435704
	3	WGS84	390071	6435714
	4	WGS84	390079	6435716
ANK25	1	WGS84	390210	6435781
	2	WGS84	390208	6435790
	3	WGS84	390197	6435789

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	390199	6435779
ANK26	1	WGS84	390270	6435864
	2	WGS84	390270	6435873
	3	WGS84	390279	6435874
	4	WGS84	390279	6435864
ANK27	1	WGS84	390306	6435691
	2	WGS84	390307	6435698
	3	WGS84	390314	6435696
	4	WGS84	390315	6435689
ANK28	1	WGS84	390379	6435645
	2	WGS84	390382	6435636
	3	WGS84	390376	6435632
	4	WGS84	390372	6435640
ANK32	1	WGS84	391092	6435861
	2	WGS84	391101	6435861
	3	WGS84	391100	6435871
	4	WGS84	391091	6435871
ANK33	1	WGS84	391186	6435707
	2	WGS84	391184	6435715
	3	WGS84	391193	6435718
	4	WGS84	391195	6435708
ANK34	1	WGS84	391495	6435713
	2	WGS84	391506	6435713
	3	WGS84	391506	6435721
	4	WGS84	391496	6435721
ANK35	1	WGS84	391771	6435741
	2	WGS84	391778	6435744
	3	WGS84	391773	6435752
	4	WGS84	391766	6435748
ANK36	1	WGS84	391764	6435627
	2	WGS84	391755	6435623
	3	WGS84	391757	6435613
	4	WGS84	391766	6435614
ANK38	1	WGS84	392665	6435829
	2	WGS84	392684	6435838
ANK39	1	WGS84	393113	6435944
	2	WGS84	393109	6435936
	3	WGS84	393100	6435941
	4	WGS84	393105	6435948
ANK40	1	WGS84	393141	6436012
	2	WGS84	393131	6436011
	3	WGS84	393133	6436002
	4	WGS84	393142	6436002
ANK41	1	WGS84	393331	6435950

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	2	WGS84	393338	6435951
	3	WGS84	393342	6435943
	4	WGS84	393331	6435938
ANK42	1	WGS84	393589	6435895
	2	WGS84	393587	6435906
	3	WGS84	393597	6435908
	4	WGS84	393599	6435898
ANK43	1	WGS84	394045	6435883
	2	WGS84	394044	6435893
	3	WGS84	394053	6435892
	4	WGS84	394054	6435883
ANK44	1	WGS84	394149	6436013
	2	WGS84	394150	6436003
	3	WGS84	394140	6436004
	4	WGS84	394140	6436013
ANK45	1	WGS84	394401	6435931
	2	WGS84	394400	6435940
	3	WGS84	394392	6435930
	4	WGS84	394390	6435939
ANK46	1	WGS84	394567	6435975
	2	WGS84	394560	6435983
	3	WGS84	394567	6435989
	4	WGS84	394575	6435983
ANK47	1	WGS84	394565	6435892
	2	WGS84	394565	6435902
	3	WGS84	394555	6435894
	4	WGS84	394556	6435903
ANK49	1	WGS84	394822	6435980
	2	WGS84	394820	6435988
	3	WGS84	394829	6435992
	4	WGS84	394831	6435982
ANK51	1	WGS84	395701	6435784
	2	WGS84	395692	6435782
	3	WGS84	395690	6435791
	4	WGS84	395699	6435794
ANK52	1	WGS84	395789	6435749
	2	WGS84	395781	6435754
	3	WGS84	395786	6435763
	4	WGS84	395795	6435758
ANK53	1	WGS84	395859	6435933
	2	WGS84	395850	6435938
	3	WGS84	395855	6435946
	4	WGS84	395865	6435942
ANK54	1	WGS84	395838	6435842

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	2	WGS84	395832	6435850
	3	WGS84	395839	6435855
	4	WGS84	395845	6435848
ANK55	1	WGS84	395972	6435786
	2	WGS84	395981	6435786
	3	WGS84	395982	6435777
	4	WGS84	395972	6435775
ANK56	1	WGS84	396092	6435763
	2	WGS84	396082	6435762
	3	WGS84	396079	6435771
	4	WGS84	396088	6435773
ANK57	1	WGS84	396147	6435859
	2	WGS84	396141	6435853
	3	WGS84	396134	6435860
	4	WGS84	396140	6435867
ANK58	1	WGS84	396121	6435961
	2	WGS84	396119	6435970
	3	WGS84	396110	6435969
	4	WGS84	396111	6435960
ANK59	1	WGS84	396246	6435796
	2	WGS84	396251	6435788
	3	WGS84	396241	6435784
	4	WGS84	396239	6435794
ANK60	1	WGS84	396378	6435820
	2	WGS84	396380	6435811
	3	WGS84	396372	6435808
	4	WGS84	396369	6435818
ANK61	1	WGS84	396470	6436043
	2	WGS84	396467	6436052
	3	WGS84	396458	6436049
	4	WGS84	396462	6436041
ANK62	1	WGS84	396518	6435771
	2	WGS84	396514	6435760
	3	WGS84	396505	6435765
	4	WGS84	396509	6435774
ANK63	1	WGS84	396553	6435951
	2	WGS84	396560	6435955
	3	WGS84	396551	6435961
	4	WGS84	396559	6435964
ANK64	1	WGS84	396740	6435813
	2	WGS84	396734	6435806
	3	WGS84	396724	6435813
	4	WGS84	396732	6435821
ANK65	1	WGS84	396800	6435936

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	2	WGS84	396800	6435926
	3	WGS84	396810	6435927
	4	WGS84	396809	6435936
ANK66	1	WGS84	396823	6435796
	2	WGS84	396816	6435792
	3	WGS84	396809	6435798
	4	WGS84	396816	6435803
ANK67	1	WGS84	396979	6436044
	2	WGS84	396982	6436052
	3	WGS84	396973	6436055
	4	WGS84	396970	6436046
ANK68	1	WGS84	397056	6435817
	2	WGS84	397057	6435809
	3	WGS84	397048	6435804
	4	WGS84	397046	6435815
ANK69	1	WGS84	397372	6435953
	2	WGS84	397374	6435964
	3	WGS84	397364	6435964
	4	WGS84	397364	6435954
ANK70	1	WGS84	397451	6436055
	2	WGS84	397457	6436048
	3	WGS84	397449	6436042
	4	WGS84	397443	6436050
ANK71	1	WGS84	397521	6435870
	2	WGS84	397521	6435878
	3	WGS84	397510	6435879
	4	WGS84	397510	6435869
ANK72	1	WGS84	397599	6435986
	2	WGS84	397596	6435995
	3	WGS84	397605	6435998
	4	WGS84	397607	6435989
ANK73	1	WGS84	397645	6436005
	2	WGS84	397654	6436002
	3	WGS84	397651	6435993
	4	WGS84	397642	6435996
ANK74	1	WGS84	385948	6435846
	2	WGS84	385953	6435841
	3	WGS84	385958	6435847
	4	WGS84	385953	6435853
ANK75a	1	WGS84	386257	6435846
	2	WGS84	386259	6435835
	3	WGS84	386245	6435834
	4	WGS84	386245	6435847
ANK75b	5	WGS84	386188	6435879

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	6	WGS84	386179	6435882
	7	WGS84	386184	6435870
	8	WGS84	386175	6435875
ANK76	1	WGS84	386404	6435876
	2	WGS84	386413	6435874
	3	WGS84	386414	6435882
	4	WGS84	386406	6435884
ANK90	1	WGS84	393901	6435961
	2	WGS84	393904	6435970
	3	WGS84	393895	6435974
	4	WGS84	393893	6435964
ANK91	1	WGS84	393486	6435963
	2	WGS84	393482	6435954
	3	WGS84	393491	6435950
	4	WGS84	393495	6435958
ANK92	1	WGS84	394232	6435909
	2	WGS84	394226	6435902
	3	WGS84	394219	6435909
	4	WGS84	394225	6435916
ANK93	1	WGS84	386484	6435758
	2	WGS84	386489	6435746
	3	WGS84	386477	6435745
	4	WGS84	386473	6435755
ANK94	1	WGS84	386709	6435757
	2	WGS84	386707	6435748
	3	WGS84	386698	6435749
	4	WGS84	386700	6435758
ANK95	1	WGS84	387330	6435506
	2	WGS84	387339	6435495
	3	WGS84	387329	6435497
	4	WGS84	387340	6435505
ANK96	1	WGS84	397901	6435963
	2	WGS84	397895	6435954
	3	WGS84	397904	6435949
	4	WGS84	397909	6435957
ANK99	1	WGS84	385770	6435916
	2	WGS84	385780	6435913
	3	WGS84	385783	6435922
	4	WGS84	385772	6435925
ANK98	1	WGS84	391564	6435785
	2	WGS84	391442	6435776
WTP31	1	WGS84	396796	6435839
	2	WGS84	396797	6435848
	3	WGS84	396788	6435850

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	396787	6435841
WTP33	1	WGS84	396907	6435854
	2	WGS84	396905	6435863
	3	WGS84	396915	6435858
	4	WGS84	396913	6435866
WTP32	1	WGS84	396734	6435874
	2	WGS84	396740	6435881
	3	WGS84	396733	6435889
	4	WGS84	396728	6435882
WTP30	1	WGS84	396044	6435837
	2	WGS84	396040	6435826
	3	WGS84	396049	6435822
	4	WGS84	396053	6435830
ANK57	1	WGS84	396147	6435859
WTP29	1	WGS84	395928	6435858
	2	WGS84	395930	6435848
	3	WGS84	395919	6435857
	4	WGS84	395922	6435847
ANK60	1	WGS84	396376	6435815
WTP28	1	WGS84	395783	6435915
	2	WGS84	395794	6435916
	3	WGS84	395795	6435924
	4	WGS84	395784	6435924
WTP24	1	WGS84	394351	6435901
	2	WGS84	394355	6435908
	3	WGS84	394364	6435903
	4	WGS84	394359	6435895
ANK92	1	WGS84	394221	6435912
WTP25	1	WGS84	394790	6435917
	2	WGS84	394780	6435927
	3	WGS84	394789	6435928
	4	WGS84	394780	6435917
ANK43	1	WGS84	394045	6435894
WTP23	1	WGS84	393827	6435882
	2	WGS84	393825	6435892
	3	WGS84	393835	6435894
	4	WGS84	393836	6435884
ANK42	1	WGS84	393589	6435897
WTP22	1	WGS84	393484	6435906
	2	WGS84	393482	6435920
	3	WGS84	393488	6435914
	4	WGS84	393476	6435912
ANK20	1	WGS84	389338	6435472
ANK19	1	WGS84	388844	6435460

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
ANK18	1	WGS84	388475	6435467
ANK99	1	WGS84	385771	6435913
WTP43	1	WGS84	385614	6435579
	2	WGS84	385614	6435589
	3	WGS84	385624	6435587
	4	WGS84	385623	6435577
WTP15	1	WGS84	390462	6435782
	2	WGS84	390433	6435775
WTP16	1	WGS84	390766	6435735
	2	WGS84	390758	6435740
	3	WGS84	390763	6435748
	4	WGS84	390773	6435743
WTP05	1	WGS84	387848	6435525
	2	WGS84	387837	6435524
	3	WGS84	387837	6435534
	4	WGS84	387846	6435533
WTP08	1	WGS84	388591	6435545
	2	WGS84	388601	6435546
	3	WGS84	388602	6435536
	4	WGS84	388591	6435535
WTP41	1	WGS84	387749	6435529
	2	WGS84	387747	6435536
	3	WGS84	387737	6435536
	4	WGS84	387738	6435527
WTP38	1	WGS84	387494	6435565
	2	WGS84	387503	6435566
	3	WGS84	387501	6435576
	4	WGS84	387492	6435575
WTP39	1	WGS84	387525	6435568
	2	WGS84	387525	6435577
	3	WGS84	387534	6435568
	4	WGS84	387534	6435577
WTP40	1	WGS84	387657	6435560
	2	WGS84	387646	6435560
	3	WGS84	387647	6435570
	4	WGS84	387657	6435570
WTP06	1	WGS84	388344	6435531
	2	WGS84	388354	6435534
	3	WGS84	388349	6435542
	4	WGS84	388339	6435540
WTP09	1	WGS84	389021	6435535
	2	WGS84	389019	6435524
	3	WGS84	389029	6435523
	4	WGS84	389030	6435534

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
WTP17	1	WGS84	392081	6435675
	2	WGS84	392071	6435676
	3	WGS84	392070	6435666
	4	WGS84	392078	6435664
WTP10	1	WGS84	389174	6435512
	2	WGS84	389172	6435522
	3	WGS84	389181	6435523
	4	WGS84	389183	6435514
WTP18	1	WGS84	392184	6435666
	2	WGS84	392193	6435672
	3	WGS84	392198	6435662
	4	WGS84	392190	6435658
WTP02	1	WGS84	386878	6435753
	2	WGS84	386886	6435762
	3	WGS84	386878	6435762
	4	WGS84	386885	6435753
WTP01	1	WGS84	386847	6435818
	2	WGS84	386851	6435810
	3	WGS84	386844	6435802
	4	WGS84	386838	6435810
WTP14	1	WGS84	390092	6435823
	2	WGS84	390087	6435830
	3	WGS84	390078	6435826
	4	WGS84	390084	6435819
WTP11	1	WGS84	389539	6435528
	2	WGS84	389538	6435539
	3	WGS84	389547	6435541
	4	WGS84	389549	6435531
WTP12	1	WGS84	389686	6435585
	2	WGS84	389686	6435594
	3	WGS84	389677	6435595
	4	WGS84	389677	6435585
WTP13	1	WGS84	389876	6435704
	2	WGS84	389867	6435702
	3	WGS84	389878	6435694
	4	WGS84	389868	6435693
WTP44	1	WGS84	397698	6435647
	2	WGS84	397673	6435618
WTP27	1	WGS84	395518	6435969
	2	WGS84	395507	6435969
	3	WGS84	395509	6435959
	4	WGS84	395517	6435959
WTP21	1	WGS84	392691	6435718
	2	WGS84	392700	6435720

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	3	WGS84	392702	6435712
	4	WGS84	392693	6435710
WTP19	1	WGS84	392425	6435643
	2	WGS84	392431	6435649
	3	WGS84	392424	6435655
	4	WGS84	392418	6435650
WTP20	1	WGS84	392697	6435869
	2	WGS84	392693	6435877
	3	WGS84	392685	6435874
	4	WGS84	392690	6435864
WTP35	1	WGS84	398491	6436320
	2	WGS84	398487	6436327
	3	WGS84	398479	6436324
	4	WGS84	398485	6436316
WTP34	1	WGS84	398025	6436022
	2	WGS84	398031	6436015
	3	WGS84	398018	6436014
	4	WGS84	398025	6436009
WTP36	1	WGS84	398450	6436159
	2	WGS84	398444	6436151
	3	WGS84	398452	6436145
	4	WGS84	398458	6436153
WTP37	1	WGS84	398004	6435850
	2	WGS84	398004	6435842
	3	WGS84	397995	6435844
	4	WGS84	397993	6435853
WLM05	1	WGS84	384256	6436424
	2	WGS84	384262	6436423
	3	WGS84	384262	6436439
	4	WGS84	384268	6436437
WLM06	1	WGS84	384171	6436126
	2	WGS84	384162	6436130
	3	WGS84	384157	6436122
	4	WGS84	384166	6436117
WLM10	1	WGS84	384217	6435958
	2	WGS84	384225	6435953
	3	WGS84	384219	6435945
	4	WGS84	384211	6435950
WLM12	1	WGS84	384162	6435907
	2	WGS84	384159	6435898
	3	WGS84	384171	6435905
	4	WGS84	384168	6435895
WLM08	1	WGS84	384097	6435951
	2	WGS84	384090	6435957

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	3	WGS84	384083	6435950
	4	WGS84	384090	6435943
WLM11	1	WGS84	384036	6435925
	2	WGS84	384031	6435916
	3	WGS84	384023	6435920
	4	WGS84	384028	6435930
WLM15	1	WGS84	384095	6435785
	2	WGS84	384097	6435794
	3	WGS84	384088	6435797
	4	WGS84	384086	6435788
WLM17	1	WGS84	383926	6435734
	2	WGS84	383930	6435742
	3	WGS84	383922	6435747
	4	WGS84	383916	6435740
WLM22	1	WGS84	383300	6434823
	2	WGS84	383307	6434813
	3	WGS84	383314	6434820
	4	WGS84	383309	6434826
WLM23	1	WGS84	383259	6434763
	2	WGS84	383253	6434771
	3	WGS84	383250	6434758
	4	WGS84	383245	6434766
WLM24	1	WGS84	382908	6434061
	2	WGS84	382905	6434070
	3	WGS84	382896	6434068
	4	WGS84	382899	6434059
WLM32	1	WGS84	382951	6433883
	2	WGS84	382943	6433883
	3	WGS84	382944	6433872
	4	WGS84	382952	6433876
WLM25	1	WGS84	382858	6434019
	2	WGS84	382858	6434029
	3	WGS84	382848	6434031
	4	WGS84	382848	6434020
WLM29	1	WGS84	382874	6433876
	2	WGS84	382876	6433866
	3	WGS84	382885	6433868
	4	WGS84	382885	6433878
WLM27	1	WGS84	382826	6433875
	2	WGS84	382826	6433885
	3	WGS84	382816	6433885
	4	WGS84	382816	6433876
WLM26	1	WGS84	382908	6433906
	2	WGS84	382912	6433898

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	3	WGS84	382903	6433894
	4	WGS84	382900	6433904
WLM33	1	WGS84	382941	6434079
	2	WGS84	382933	6434080
	3	WGS84	382941	6434070
	4	WGS84	382930	6434071
WLM16	1	WGS84	385089	6435772
	2	WGS84	385092	6435781
	3	WGS84	385082	6435783
	4	WGS84	385079	6435774
WLM28	1	WGS84	382777	6433822
	2	WGS84	382777	6433831
	3	WGS84	382787	6433832
	4	WGS84	382787	6433823
WLM34	1	WGS84	382942	6434223
	2	WGS84	382931	6434225
	3	WGS84	382929	6434217
	4	WGS84	382939	6434215
WLM07	1	WGS84	385307	6436060
	2	WGS84	385317	6436061
	3	WGS84	385317	6436051
	4	WGS84	385308	6436050
WLM19	1	WGS84	383815	6435591
	2	WGS84	383807	6435598
	3	WGS84	383801	6435591
	4	WGS84	383809	6435584
WLM20	1	WGS84	383729	6435476
	2	WGS84	383723	6435467
	3	WGS84	383732	6435462
	4	WGS84	383737	6435471
WLM21	1	WGS84	383555	6435201
	2	WGS84	383563	6435197
	3	WGS84	383568	6435205
	4	WGS84	383560	6435211
WLM36	1	WGS84	383626	6435331
	2	WGS84	383633	6435327
	3	WGS84	383640	6435335
	4	WGS84	383632	6435340
WLM01	1	WGS84	384557	6437754
	2	WGS84	384547	6437757
	3	WGS84	384551	6437767
	4	WGS84	384559	6437763
WLM02	1	WGS84	384520	6437431
	2	WGS84	384526	6437455

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	3	WGS84	384530	6437454
	4	WGS84	384524	6437430
WLM13	1	WGS84	385092	6435870
	2	WGS84	385083	6435873
	3	WGS84	385079	6435866
	4	WGS84	385089	6435862
WLM04	1	WGS84	384423	6437032
	2	WGS84	384414	6437037
	3	WGS84	384418	6437045
	4	WGS84	384427	6437042
WLM03	1	WGS84	384482	6437196
	2	WGS84	384489	6437194
	3	WGS84	384485	6437186
	4	WGS84	384477	6437189
WLM09	1	WGS84	385332	6435932
	2	WGS84	385328	6435940
	3	WGS84	385336	6435944
	4	WGS84	385341	6435936
WLM30	1	WGS84	385236	6435739
	2	WGS84	385238	6435748
	3	WGS84	385248	6435746
	4	WGS84	385245	6435736
WLM18	1	WGS84	385232	6435808
	2	WGS84	385228	6435798
	3	WGS84	385219	6435802
	4	WGS84	385222	6435811
WLM14	1	WGS84	385340	6435839
	2	WGS84	385337	6435849
	3	WGS84	385347	6435850
	4	WGS84	385349	6435842
WLM38	1	WGS84	385411	6435805
	2	WGS84	385403	6435801
	3	WGS84	385405	6435792
	4	WGS84	385414	6435796
WLM40	1	WGS84	385373	6435636
	2	WGS84	385368	6435644
	3	WGS84	385366	6435630
	4	WGS84	385360	6435639
WLM41	1	WGS84	385280	6435981
	2	WGS84	385290	6435984
	3	WGS84	385286	6435993
	4	WGS84	385277	6435991
WLM42	1	WGS84	385453	6435739
	2	WGS84	385452	6435749

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	3	WGS84	385462	6435742
	4	WGS84	385461	6435751
WLMR43	1	WGS84	385496	6435971
	2	WGS84	385522	6436017
WLM01R	1	WGS84	384557	6437754
	2	WGS84	384547	6437757
	3	WGS84	384551	6437767
	4	WGS84	384559	6437763
WLM02R	1	WGS84	384520	6437431
	2	WGS84	384526	6437455
	3	WGS84	384530	6437454
	4	WGS84	384524	6437430
WLM07R	1	WGS84	385307	6436060
	2	WGS84	385317	6436061
	3	WGS84	385317	6436051
	4	WGS84	385308	6436050
WLM09R	1	WGS84	385332	6435932
	2	WGS84	385328	6435940
	3	WGS84	385336	6435944
	4	WGS84	385341	6435936
WLM13R	1	WGS84	385092	6435870
	2	WGS84	385083	6435873
	3	WGS84	385079	6435866
	4	WGS84	385089	6435862
WLM14R	1	WGS84	385340	6435839
	2	WGS84	385337	6435849
	3	WGS84	385347	6435850
	4	WGS84	385349	6435842
WLM15R	1	WGS84	384095	6435785
	2	WGS84	384097	6435794
	3	WGS84	384088	6435797
	4	WGS84	384086	6435788
WLM16R	1	WGS84	385089	6435772
	2	WGS84	385092	6435781
	3	WGS84	385082	6435783
	4	WGS84	385079	6435774
WLM25R	1	WGS84	382858	6434019
	2	WGS84	382858	6434029
	3	WGS84	382848	6434031
	4	WGS84	382848	6434020
WLM26R	1	WGS84	382908	6433906
	2	WGS84	382912	6433898
	3	WGS84	382903	6433894
	4	WGS84	382900	6433904

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
WLM27R	1	WGS84	382826	6433875
	2	WGS84	382826	6433885
	3	WGS84	382816	6433885
	4	WGS84	382816	6433876
WLM29R	1	WGS84	382874	6433876
	2	WGS84	382876	6433866
	3	WGS84	382885	6433868
	4	WGS84	382885	6433878
WLM40R	1	WGS84	385373	6435636
	2	WGS84	385368	6435644
	3	WGS84	385366	6435630
	4	WGS84	385360	6435639
WLM44	1	WGS84	383007	6434466
ROC15	1	WGS84	385759	6434387
	2	WGS84	385750	6434386
	3	WGS84	385750	6434376
	4	WGS84	385761	6434377
ROC05	1	WGS84	385464	6435478
	2	WGS84	385455	6435477
	3	WGS84	385456	6435467
	4	WGS84	385463	6435466
ROC06	1	WGS84	385600	6435469
	2	WGS84	385590	6435468
	3	WGS84	385602	6435460
	4	WGS84	385591	6435460
ROC21	1	WGS84	385736	6434496
	2	WGS84	385727	6434495
	3	WGS84	385728	6434484
	4	WGS84	385738	6434487
ROC23	1	WGS84	385650	6434903
	2	WGS84	385660	6434903
	3	WGS84	385660	6434912
	4	WGS84	385650	6434911
ROC08	1	WGS84	385527	6435187
	2	WGS84	385523	6435196
	3	WGS84	385515	6435192
	4	WGS84	385517	6435183
ROC10	1	WGS84	385673	6434795
	2	WGS84	385675	6434786
	3	WGS84	385666	6434783
	4	WGS84	385665	6434794
ROC07	1	WGS84	385505	6435296
	2	WGS84	385514	6435298
	3	WGS84	385513	6435306

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	385504	6435305
ROC22	1	WGS84	385482	6435250
	2	WGS84	385490	6435251
	3	WGS84	385488	6435261
	4	WGS84	385480	6435260
ROC24	1	WGS84	385494	6435134
	2	WGS84	385492	6435125
	3	WGS84	385503	6435131
	4	WGS84	385501	6435123
ROC11	1	WGS84	385490	6434691
	2	WGS84	385481	6434688
	3	WGS84	385478	6434697
	4	WGS84	385487	6434700
ROC13	1	WGS84	385499	6434517
	2	WGS84	385507	6434528
	3	WGS84	385498	6434526
	4	WGS84	385507	6434520
ROC01	1	WGS84	385277	6436437
	2	WGS84	385267	6436435
	3	WGS84	385267	6436426
	4	WGS84	385277	6436427
ROC03	1	WGS84	385362	6436184
	2	WGS84	385353	6436183
	3	WGS84	385352	6436194
	4	WGS84	385362	6436194
ROC12	1	WGS84	385705	6434337
	2	WGS84	385706	6434330
	3	WGS84	385716	6434331
	4	WGS84	385713	6434339
ROC02	1	WGS84	385258	6436257
	2	WGS84	385254	6436267
	3	WGS84	385245	6436264
	4	WGS84	385249	6436254
ROC25	1	WGS84	385281	6436212
	2	WGS84	385283	6436204
	3	WGS84	385272	6436201
	4	WGS84	385270	6436212
ROC19	1	WGS84	385721	6434011
	2	WGS84	385717	6434021
	3	WGS84	385707	6434016
	4	WGS84	385711	6434008
ROC18	1	WGS84	385645	6434075
	2	WGS84	385654	6434074
	3	WGS84	385656	6434083

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	385647	6434084
ROC20	1	WGS84	385778	6434275
	2	WGS84	385782	6434278
	3	WGS84	385776	6434288
	4	WGS84	385775	6434287
ROC04	1	WGS84	385630	6436000
	2	WGS84	385641	6435994
	3	WGS84	385621	6435986
	4	WGS84	385635	6435981
ROC27	1	WGS84	385602	6434872
	2	WGS84	385600	6434860
	3	WGS84	385608	6434864
	4	WGS84	385615	6434873
ROC16	1	WGS84	385662	6434137
	2	WGS84	385657	6434146
	3	WGS84	385648	6434143
	4	WGS84	385653	6434133
ROC30	1	WGS84	385591	6434043
	2	WGS84	385592	6434053
	3	WGS84	385601	6434052
	4	WGS84	385601	6434042
ROC31	1	WGS84	385591	6434412
	2	WGS84	385591	6434421
	3	WGS84	385582	6434420
	4	WGS84	385582	6434410
ROC32	1	WGS84	385541	6434789
	2	WGS84	385552	6434789
	3	WGS84	385552	6434779
	4	WGS84	385541	6434780
ROC33	1	WGS84	385446	6435307
	2	WGS84	385449	6435299
	3	WGS84	385458	6435302
	4	WGS84	385456	6435311
ROCR34	1	WGS84	385432	6435092
	2	WGS84	385431	6435118
ROCR38	1	WGS84	385076	6436110
	2	WGS84	385143	6436126
ROC19R	1	WGS84	385721	6434011
	2	WGS84	385717	6434021
	3	WGS84	385707	6434016
	4	WGS84	385711	6434008
ROC18R	1	WGS84	385645	6434075
	2	WGS84	385654	6434074
	3	WGS84	385656	6434083

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	385647	6434084
ROC16R	1	WGS84	385662	6434137
	2	WGS84	385657	6434146
	3	WGS84	385648	6434143
	4	WGS84	385653	6434133
ROC31R	1	WGS84	385591	6434412
	2	WGS84	385591	6434421
	3	WGS84	385582	6434420
	4	WGS84	385582	6434410
ROC12R	1	WGS84	385705	6434337
	2	WGS84	385706	6434330
	3	WGS84	385716	6434331
	4	WGS84	385713	6434339
ROC06R	1	WGS84	385600	6435469
	2	WGS84	385590	6435468
	3	WGS84	385602	6435460
	4	WGS84	385591	6435460
ROC24R	1	WGS84	385494	6435134
	2	WGS84	385492	6435125
	3	WGS84	385503	6435131
	4	WGS84	385501	6435123
ROC08R	1	WGS84	385527	6435187
	2	WGS84	385523	6435196
	3	WGS84	385515	6435192
	4	WGS84	385517	6435183
ROC22R	1	WGS84	385482	6435250
	2	WGS84	385490	6435251
	3	WGS84	385488	6435261
	4	WGS84	385480	6435260
ROC07R	1	WGS84	385505	6435296
	2	WGS84	385514	6435298
	3	WGS84	385513	6435306
	4	WGS84	385504	6435305
ROC30R	1	WGS84	385591	6434043
	2	WGS84	385592	6434053
	3	WGS84	385601	6434052
	4	WGS84	385601	6434042
ROC32R	1	WGS84	385541	6434789
	2	WGS84	385552	6434789
	3	WGS84	385552	6434779
	4	WGS84	385541	6434780
ROC33R	1	WGS84	385446	6435307
	2	WGS84	385449	6435299
	3	WGS84	385458	6435302

SITE	PEG ID	DATUM/ZONE	EASTING (mE)	NORTHING (mN)
	4	WGS84	385456	6435311