

**Western Queensland - Gulf Plains,
Northwest Highlands, Mitchell Grass
Downs and Channel Country Bioregions**

**Strategic Offset Investment Corridors
Methodology Report**

April 2016

Prepared by: Strategic Environmental Programs/Conservation and Sustainability Services, Department of Environment and Heritage Protection

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Introduction

Strategic Offset Investment Corridors (SOICs) identify some of the best places in the landscape for environmental offsets. SOICs make offsets easier and cheaper to find, provide income opportunities for landholders willing to provide offsets on their land, and provide strategic conservation benefits for important environmental values.

These corridors are strategic planning tools that have no implications for land tenure or use. Landholder participation in providing an offset in a SOIC is completely voluntary. This document describes how the corridors should be used, the methodology used in developing them, and the environmental values contained within the SOICs.

Offsets may be required under the Queensland Environmental Offsets Framework for certain prescribed development activities that have a significant residual impact on prescribed environmental matters. These development activities and environmental matters are prescribed in the Environmental Offsets Regulation 2014 and include Matters of State Environmental Significance (MSES) and Matters of National Environmental Significance (MNES).

The Queensland Environmental Offsets Policy provides a decision-support tool for the assessment of offset proposals. Under the Policy, proponents are guided to preferentially seek offset opportunities in SOICs.

The SOIC comprises of three priority areas which are under low development pressure and are not zoned for high impact development activities. The SOICs, therefore, are areas where land is most suitable and beneficial for offset activities, as they provide landscape-scale outcomes for impacted environmental matters. Within the SOICs, the three priority classes identified contain conservation hubs and corridors.

Conservation hubs

Conservation hubs are potential focus areas for offset provision. These hubs generally consist of land adjacent to existing protected areas or areas with high conservation value, and generally represent large tracts of remnant vegetation and areas with potential for improvements in ecological condition. Thirty-six conservation hubs were identified across the four bioregions in Western Queensland.

Corridors

Corridors are also potential areas for offset provision. These corridors are primarily based on the Biodiversity Planning Assessment wildlife corridors (Criteria J), in the Biodiversity Planning Assessment documents for the Gulf Plains, Mitchell Grass Downs and Channel Country available at www.qld.gov.au (search 'Biodiversity Planning Assessments'). These corridors have been identified either because they are existing vegetated corridors important for landscape contiguity (these can include regrowth), or cleared areas that could serve this purpose if revegetated. Some examples of corridors include contiguous remnant vegetation, vegetation along riparian habitats, or 'stepping stone' corridors which consist of patches of remnant vegetation through the landscape.

Priority 1 areas, being the primary areas for offsets provision, include both conservation hubs and corridors. Some river corridors have been included in priority 1 areas due to their ecological significance and habitat for several threatened species.

Purpose

The SOICs identify areas within the Northwest Highlands, Gulf Plains, Mitchell Grass Downs and Channel Country bioregions that hold Matters of National and State Environmental Significance and other irreplaceable values that are connected in the landscape.

By maintaining and improving the biodiversity values within the SOIC, the broad outcomes will include improved long-term viability of ecosystems, species and the services they provide through:

- protection and/or enhancement of large tracts of remnant habitat with particularly significant environmental values
- protection and/or enhancement of connectivity, and hence reducing the effects of habitat isolation of species.

Methods used to develop the SOIC

A range of existing information sources and tools were combined to assist planning for the development of the SOIC areas. In particular the key information included:

- areas of high conservation value as identified through the use of conservation planning software (Marxan and Cplan)
- information from Biodiversity Planning Assessments which spatially map the strategic values (including wildlife corridors) in the bioregions
- regional ecosystem mapping
- expert field knowledge (ecological expert workshops were conducted Mt Isa and Longreach, with landholder workshops held in Hughenden, Julia Creek, Croydon, Gregory Downs, Cloncurry, Boulia, Winton, Longreach, Windorah and Blackall)
- mapped projective foliage cover of greater than 6% (areas containing woody vegetation with projective foliage cover greater than 6% represents vegetation with the potential to become a functioning ecosystem if rehabilitated).

Ecologists in the Department of Environment and Heritage Protection carried out an analysis using these data sources to ensure that the SOIC areas provide the best opportunity to support ecological function and biological diversity of the bioregions.

Some of the key criteria that inform the process for identifying conservation hubs include:

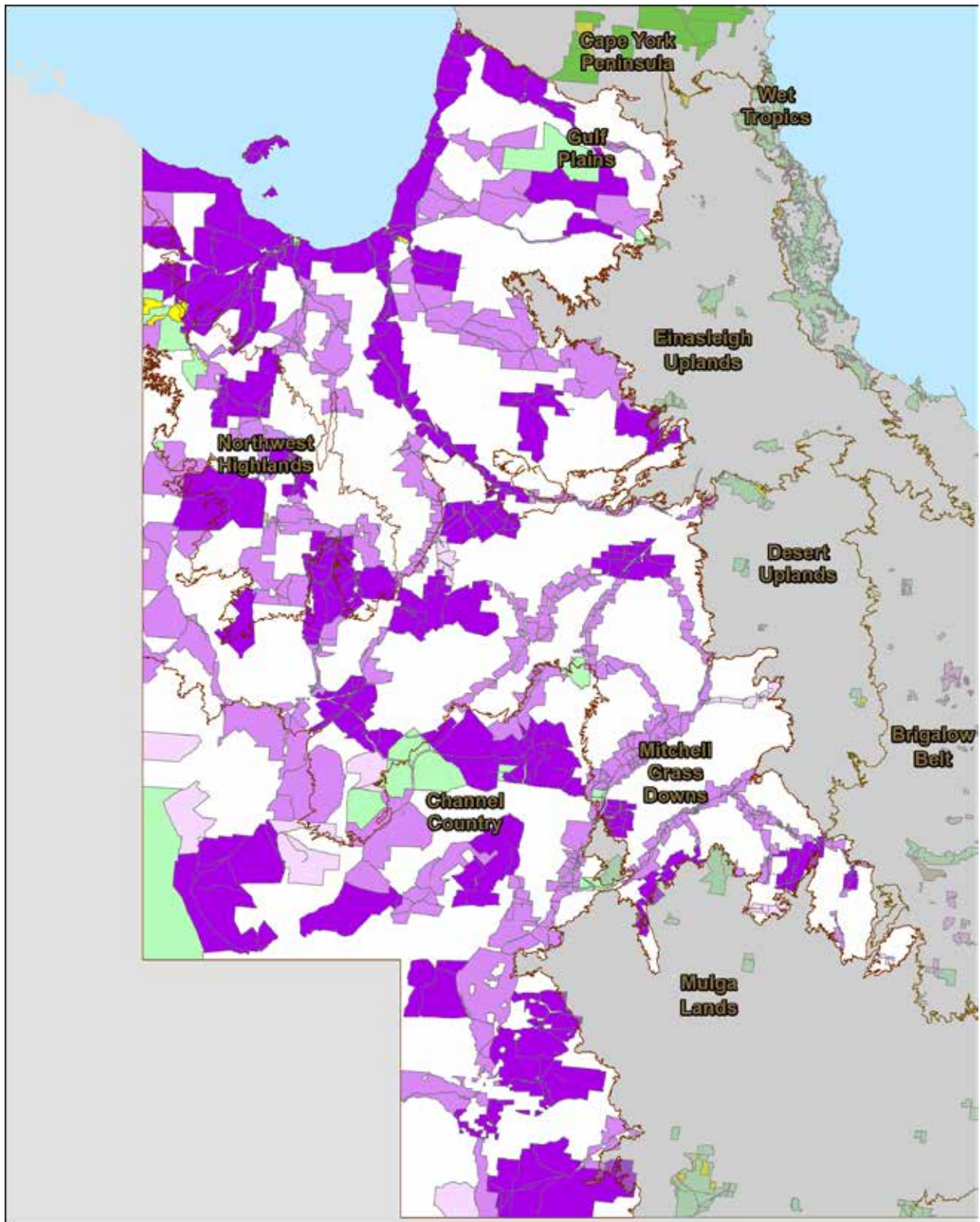
- the contribution to long-term climate change resilience of biodiversity
- representation of freshwater or geological features and the range of terrestrial ecosystems
- whether the area provides ecosystem services
- whether the area is important for threatened species
- land condition and level of threat
- the potential for rehabilitation, maintenance or enhancement of the environmental values.

The initial draft hubs and corridors were then subject to a sequence of spatial analysis processes including:

- exclusion of all land covered by granted mining production leases
- exclusion of contiguous blocks less than 10 hectares in size
- exclusion of blocks on which there is less than 10 hectares of remnant vegetation
- attribution of the remaining blocks with existing mapped state interests, including various strategically significant agricultural land zonings, and forest product and quarrying extraction rights
- attribution with summaries of a range of MSES and MNES including regional ecosystems, wetland habitats and modelled habitat of threatened species.

All landholders within the SOIC were informed of the SOIC and provided with an opportunity to register their interest in providing offsets on their land. The contact details and lots on plans of all interested parties, regardless of whether their land is inside or outside the SOIC, is kept by the Department in a confidential database. Should a block of land held by a registered landholder be identified by a proponent, broker or delegated decision maker as a suitable site for a particular offset, the landholder will be asked if they wish their contact details to be passed to the entity with an interest in the potential offset site. The Department will continue to update the register of landholder interest in providing offsets on an ongoing basis.

Map 1 (below) shows the entire footprint of the hubs, corridors and extra areas that were developed for Western Queensland.



**Western Bioregions
Strategic Investment
Offset Hubs**



(c) Department of Environment and Heritage Protection 2015

Legend

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strategic Offset Hubs and Corridors | Protected Areas of Queensland |
| <p>PRIORITY</p> <ul style="list-style-type: none"> 1 (Dark Purple) 2 (Medium Purple) 3 (Light Purple) | <ul style="list-style-type: none"> National Park National Park (QPMU) Regional Park Forest Reserve State Forest Botanic Reserve |

0 50 100 200 km



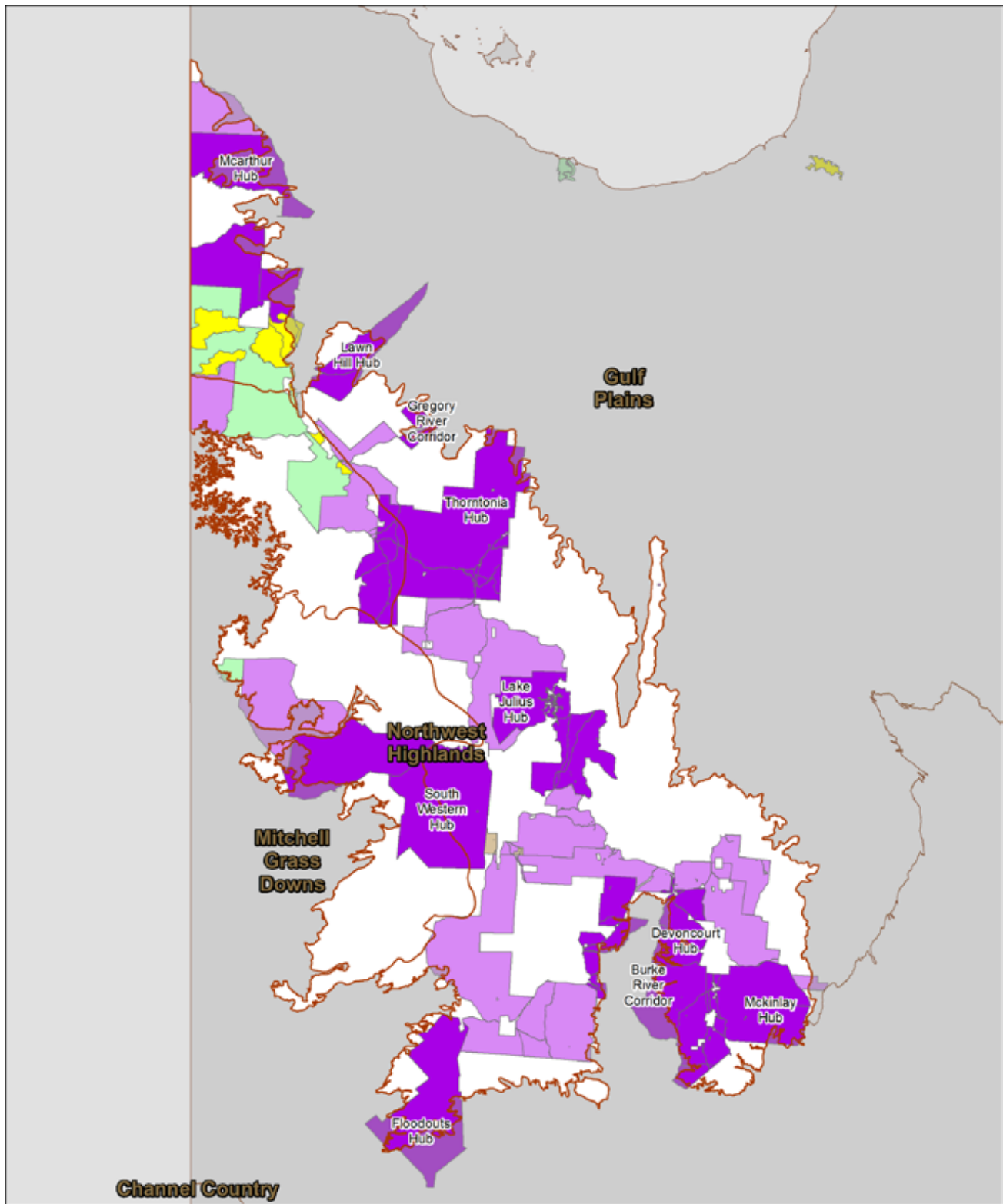
Map 1: The complete footprint of the priority 1, 2 and 3 areas developed within Western Queensland.

Environmental Values within SOIC areas

Summary of areas within the Western Queensland SOIC areas by bioregions

| | Northwest Highlands | Gulf Plains | Mitchell Grass Downs | Channel Country |
|---------------------------------------------------------------|---------------------|--------------|----------------------|-----------------|
| Bioregion area | 7,343,644ha | 21,910,949ha | 24,162,338ha | 23,217,303ha |
| SOIC area | 3,678,420ha | 9,876,963ha | 8,097,171ha | 10,908,599ha |
| Areas in protected estate | 378,617ha | 566,046ha | 352,066ha | 1,578,788ha |
| SOIC priority 1 | 2,222,434ha | 5,961,831ha | 3,107,259ha | 6,320,687ha |
| SOIC priority 2 | 1,455,960ha | 3,915,014ha | 4,475,818ha | 3,602,255ha |
| SOIC priority 3 | 0ha | 0ha | 513,835ha | 985,329ha |
| Number of regional ecosystems represented in SOIC area | 93 | 169 | 197 | 95 |

Map 2 provides the names of each of the areas identified in the Northwest Highlands Bioregion, each of which is described on the following pages.

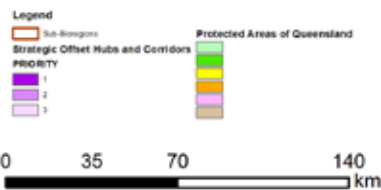


Northwest Highlands

Strategic Investment Offset Hubs



(c) Department of Environment and Heritage Protection 2015



Map 2: The Northwest Highlands strategic offset priority 1 and 2 areas.

Northwest Highlands Bioregion

Priority 1 Areas

McArthur Hub

- Covers 292,266ha in area, with representation of the following subregions: McArthur - 192,633ha and Doomadgee Plains - 99,635ha. These subregions currently have 32.39% and 0% levels of protection respectively.
- Provides representation of 32 regional ecosystems of which six have Of Concern VMA class. Eight regional ecosystems have no representation and 11 have low representation on protected area. There is 68ha of non-remnant vegetation.
- Provides habitat for six threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), ghost bat (*Macroderma gigas*) (V), gulf snapping turtle (*Elseya lavarackorum*) (V), purple-crowned fairy-wren (*Malurus coronatus*) (V), purple-necked rock-wallaby (*Petrogale purpureicollis*) (V) and orange leaf-nosed bat (*Rhinonicteris aurantia*) (V). Provides habitat for one threatened flora species, namely - *Solanum carduiforme* (V).
- Several creeks traverse this hub and it falls within the Nicholson and Settlement catchments.
- McArthur Hub adjoins and is directly north of Boodjamulla National Park.

Herbertvale Hub

- Covers 65,067ha in area, with representation of the following subregions: McArthur - 9,090ha, Barkly Tableland - 1,441ha and Thornton - 54,535ha. These subregions currently have 32.39%, 0.14% and 21.53% levels of protection respectively.
- Provides representation of 13 regional ecosystems of which one has Of Concern VMA class. Four regional ecosystems have low representation on protected area. There is 26ha of non-remnant vegetation.
- Provides habitat for two threatened fauna species, namely - purple-crowned fairy-wren (*Malurus coronatus*) (V) and purple-necked rock-wallaby (*Petrogale purpureicollis*) (V).
- Several creeks traverse this hub and it falls within the Nicholson catchment.
- Herbertvale Hub is directly west of Boodjamulla National Park.

Lawn Hill Hub

- Covers 131,934ha in areas surrounding Lawn Hill National Park, with representation of the following subregions: McArthur - 24,243ha, Armraynald Plains - 7,788ha, Mount Isa Inlier - 55,032ha and Doomadgee Plains - 25,870ha. These subregions have 33.3%, 0.68%, 0% and 0% levels of protection respectively.
- Provides representation of 35 regional ecosystems of which five have Of Concern VMA status, six have no representation and 27 have low representation on the protected area estate.
- Provides habitat for six threatened fauna species, namely - gulf snapping turtle (*Elseya lavarackorum*) (V), purple-crowned fairy-wren (*Malurus coronatus*) (V), purple-necked rock wallaby (*Petrogale purpureicollis*) (V), ghost bat (*Macroderma gigas*) (V), beach stone-curlew (*Esacus magnirostris*) (V) and Australian painted snipe (*Rostratula australis*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater Sawfish (*Pristis pristis*) (V).
- The Directory of Important Wetlands - Musselbrook Creek Aggregation -18,305ha falls within the Lawn Hill hub and the hub is located within the Nicholson catchment.

Thorntonia Hub

- Covers 462,387ha in area, with representation of the following subregions: Southwestern Plateaus and Floodouts - 4,092ha, Donors Plateau - 8,009ha, Doomadgee Plains - 2,915ha, Thornton - 99,735ha and Mount Isa Inlier - 347,636ha. These subregions currently have 0.85%, 0.06%, 0%, 21.53% and 0% levels of protection respectively.
- Provides representation of 37 regional ecosystems of which four have Of Concern VMA class. Eight regional ecosystems have no representation and 17 have low representation on protected area.
- Provides habitat for three threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), beach stone-curlew (*Esacus magnirostris*) (V) and purple-necked rock-wallaby (*Petrogale purpureicollis*) (V).
- Thornton Hub contains the Thornton wetland aggregation. The Seymour and Thornton rivers traverse the Hub. Thornton Hubs falls within the Leichhardt and Nicholson catchments.

Lake Julius Hub

- Covers 187,468ha in area and falls completely within the Mount Isa Inlier subregion which has 0% level of protection.
- Provides representation of 12 regional ecosystems of which four have no representation and seven have low representation on protected area. There is 125ha of non-remnant vegetation.
- Provides habitat for five threatened fauna species, namely - purple-necked rock-wallaby (*Petrogale purpureicollis*) (V), Australian painted snipe (*Rostratula australis*) (V), Julia Creek dunnart (*Sminthopsis douglasi*) (E), yellow chat (gulf) (*Epthianura crocea crocea*) (V) and painted honeyeater (*Grantiella picta*) (V).
- Lake Julius falls within this Hub. The Dugald and Leichhardt rivers traverse the Hub. Lake Julius Hub falls within the Flinders and Leichhardt catchments.

South Western Hub

- Covers 714,945ha in area, with representation of the following subregions: Southwestern Plateaus and Floodouts - 341,400ha, Mount Isa Inlier - 143,042ha and Barkly Tableland - 230,497ha. These subregions currently have 0.85%, 0% and 0.14% levels of protection respectively.
- Provides representation of 32 regional ecosystems of which nine have no representation and 18 have low representation on protected area.
- Provides habitat for one threatened fauna species, namely - purple-necked rock-wallaby (*Petrogale purpureicollis*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Carpentarian antechinus (*Pseudantechinus mimulus*) (V).
- The Little Templeton and Templeton rivers traverse this Hub and it falls predominantly within the Georgina catchment.

Devoncourt Hub

- Covers 106,291ha in area, with representation of the following subregions: Mount Isa Inlier - 69,875ha, Southwestern Downs - 36,415ha. These subregions currently have 0% and 7.82% levels of protection respectively.
- Provides representation of 24 regional ecosystems of which 21 have low or no representation in the protected area estate.
- Provides habitat for seven threatened fauna species, namely - purple-necked rock-wallaby (*Petrogale purpureicollis*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), Australian painted snipe (*Rostratula australis*) (V), painted honeyeater (*Grantiella picta*) (V), Julia Creek dunnart (*Sminthopsis douglasi*) (E), ghost bat (*Macroderma gigas*) (V) and potential habitat for the night parrot (*Pezoporus occidentalis*) (E).
- Devoncourt Hub falls within the Flinders and Georgina catchments with the Cloncurry River and various tributaries running through it. Six Mile Lagoon is located in the south-eastern part of the Hub.
- Blackdown Hub is strategically located adjacent and connecting Blackdown Tableland NP and Arthurs Bluff State Forest to Taunton NP and consolidating Wallaby Lane Nature Refuge.

Floodouts Hub

- Covers 217,017ha in area, with representation of the following subregions: Mount Isa Inlier - 141,465ha, Georgina Limestone - 57,576ha and Barkly Tableland - 17,978ha, which currently have 0%, 0% and 0.14% level of protection respectively.
- Provides representation of 31 regional ecosystems of which one has Of Concern VMA class. Sixteen regional ecosystems have no representation and 13 have low representation on protected area. There is 5ha of non-remnant vegetation.
- Provides habitat for one threatened fauna species, namely - purple-necked rock-wallaby (*Petrogale purpureicollis*) (V).
- The Floodout Hub falls within the Georgina catchment.

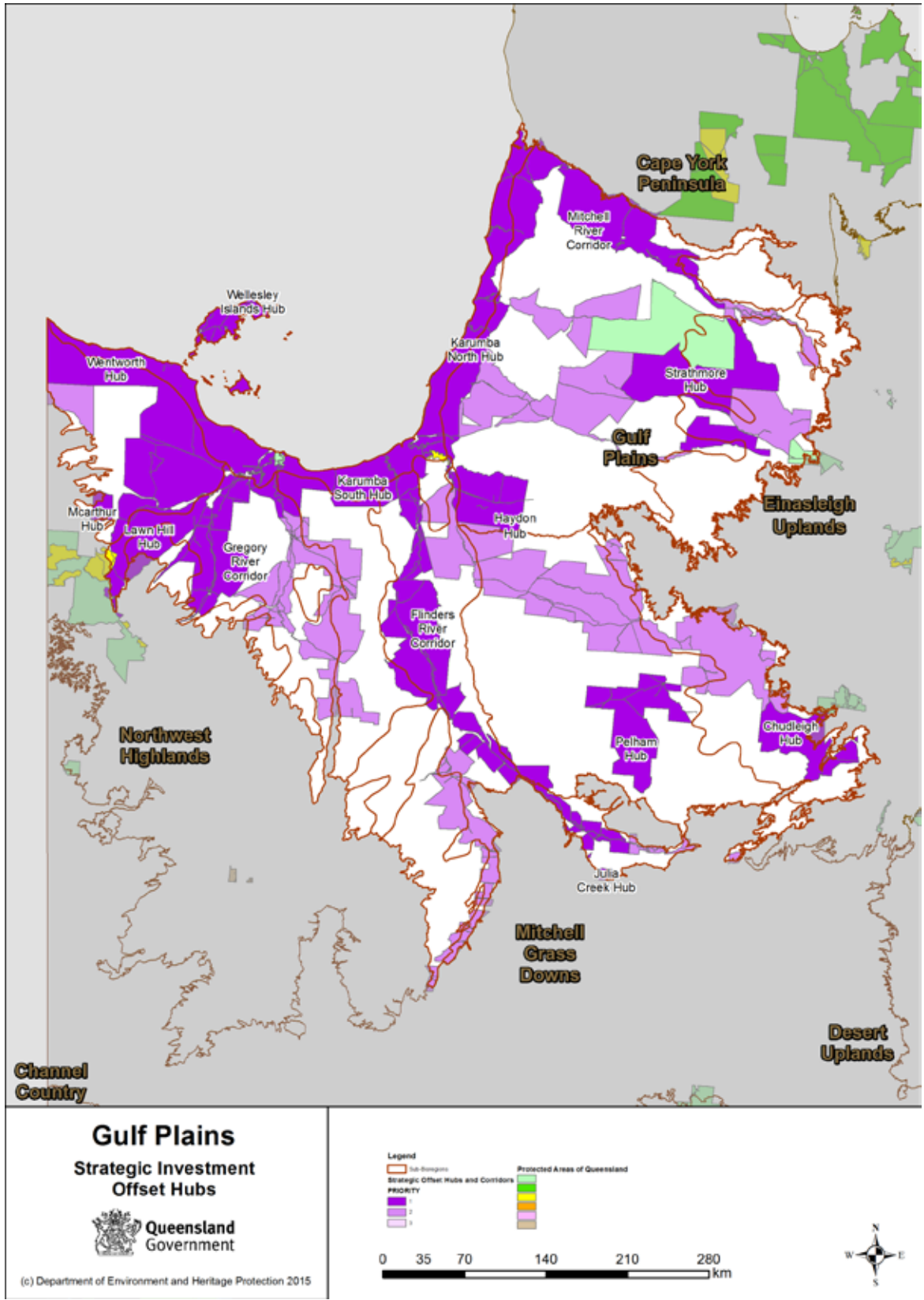
McKinlay Hub

- Covers 181,679ha in area, with representation of the following subregions: Mount Isa Inlier - 176,282ha and Kynuna Plateau - 5,396ha. These subregions currently have no protection.
- Provides representation of 25 regional ecosystems of which nine have no representation and 12 have low representation on protected area.

- Provides habitat for four threatened fauna species, namely - purple-necked rock-wallaby (*Petrogale purpureicollis*) (V), ghost bat (*Macroderma gigas*) (V), painted honeyeater (*Grantiella picta*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Carpentarian antechinus (V).
- McKinlay, Cloncurry and Mort rivers traverse the Hub. Some springs occur within the Hub and the Hub falls within the Flinders and Georgina catchments.

Northwest Highlands Priority 2 Areas

- Covers 1,506,543ha, with representation of the following subregions: Barkly Tableland - 52,680ha, Thorntonia - 64,857ha, Doomadgee Plains - 733ha, Armraynald Plains - 6,966ha, Donors Plateau - 4,562ha, Mount Isa Inlier - 1,200,110ha, Southwestern Plateaus and Floodouts - 129,687ha and Southwestern Downs -46,947ha. These subregions currently have 0.14%, 21.66%, 0%, 0.68%, 0.06%, 0%, 0.85% and 7.82% levels of protection respectively.
- Provides representation of 70 regional ecosystems of which four have Of Concern VMA status, 25 have no representation and 42 have low representation on the protected area estate. There is 1,503ha of non-remnant vegetation.
- Provides habitat for seven threatened fauna species, namely - gulf snapping turtle (*Elseya lavarackorum*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), northern leaf-nosed bat (*Hipposideros stenotis*) (V), ghost bat (*Macroderma gigas*) (V), purple-crowned fairy-wren (*Malurus coronatus*) (V), purple-necked rock-wallaby (*Petrogale purpureicollis*) (V) and orange leaf-nosed bat (*Rhinonictis aurantia*) (V). Habitat is also present for two EPBC listed threatened fauna species, namely - Plains Death Adder (*Acanthophis hawkei*) (V) and Carpentarian antechinus (*Pseudantechinus mimulus*) (V).
- The corridors fall within the Flinders, Georgina, Leichhardt and Nicholson catchments. These Northwest Highland corridor areas cover Directory of Important Wetlands - Gregory River - 12,395ha and Thorntonia Aggregation - 51,396ha and 12 intact high ecological value springs. The Buckley, Cloncurry, Leichhardt, Malbon, McKinlay, Mort, O'Shannassy, Seymour and Thornton rivers are covered by these corridor areas.



Map 3: The Gulf Plains Bioregion strategic offset priority 1 and 2 areas.

Gulf Plains Bioregion

Priority 1 Areas

Chudleigh Hub

- Covers 254,129ha in area with representation of the following subregions - Gilberton Plateau - 229,931ha, Kidston - 20,407ha and Undara - Toomba Basalts - 3,792ha. These subregions currently have 0.32%, 1.81% and 7.06% levels of protection respectively.
- Provides representation of 38 regional ecosystems of which four have Of Concern VMA Status, 13 have no representation and 22 have low representation on protected area estate.
- Contains high altitudinal refugia with high density populations of greater gliders, Mount Cooper lerista and chestnut dunnarts.
- Provides habitat for nine threatened fauna species, namely - yakka skink (*Egernia rugosa*) (V), Australian painted snipe (*Rostratula australis*) (V), Mount Cooper striped lerista (*Lerista vittata*) (V), koala (*Phascolarctos cinereus*) (V), vine-thicket fine-lined slider (*Lerista cinerea*) (V), squatter pigeon (southern subspecies) (*Geophaps scripta scripta*) (V), ghost bat (*Macroderma gigas*) (V), red goshawk (*Erythrotriorchis radiatus*) (E) and ornamental snake (*Denisonia maculata*) (V). Provides habitat for seven threatened flora species, namely - *Cycas couttsiana* (V), *Acacia crombiei* (V), Hairy joint grass (*Arthraxon hispidus*) (V), *Kardomia squarrosa* (V), *Drummondia calida* (V), *Cycas cairnsiana* (V) and *Dichanthium queenslandicum* (V).
- The Stawell and Woolgar rivers traverse Chudleigh Hub and several intact and ecologically important springs are located within the Hub.

Flinders River Corridor

- Covers 845,572ha in area with representation of the following subregions - Donors Plateau - 931ha, Central Downs - 5,010ha, Claraville Plains - 43,904ha, Flinders - 996ha and Woondoola Plains - 755,099ha. These subregions have 0.06%, 0.22%, 0%, 0% and 0% levels of protection respectively.
- Provides representation of 35 regional ecosystems of which one has Endangered and two have Of Concern VMA Status, 19 have no representation and 17 have low representation on the protected area estate.
- Provides habitat for six threatened fauna species, namely - Julia Creek dunnart (*Sminthopsis douglasi*) (E), purple-necked rock wallaby (*Petrogale purpureicollis*) (V), pink gidgee (*Acacia crombiei*) (V), purple crowned fairy-wren (*Malurus coronatus*) (V), Australian painted snipe (*Rostratula australis*) (V), painted honeyeater (*Grantiella picta*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater Sawfish (*Pristis Pristis*) (V).
- The Bynoe, Cloncurry, Dugald, Flinders and Stawell rivers traverse this priority 1 area.

Gregory River Corridor

- Covers 354,768ha in area with representation of the following subregions - Karumba Plains - 1,379ha, Armraynald Plains - 332,254ha, Mount Isa Inlier - 2,615ha and Doomadgee Plains - 706ha. These subregions have 1.3%, 0.68%, 0% and 0% levels of protection respectively.
- Provides representation of 34 regional ecosystems of which 5 have Of Concern VMA status, 11 have no representation and 22 have low representation on the protected area estate.
- Provides habitat for two threatened fauna species, namely - gulf snapping turtle (*Eiseya lavarackorum*) (V) and purple crowned fairy-wren (*Malurus coronatus*) (V).
- Provides representation of two Directory of Important Wetlands - Gregory River - 9,140ha and Nicholson Delta Aggregation - 7,556ha. The Albert, Barkly and Gregory rivers traverse this priority 1 area.

Haydon Hub

- Covers 264,057ha in area with representation of the following subregions - Donors Plateau - 1,328ha, Mitchell-Gilbert Fans - 244,165ha, Claraville Plains - 1,750ha and Woondoola Plains - 16,814ha.
- Provides representation of 17 regional ecosystems of which four have no representation and 12 have low representation on protected area estate. There is 1,730ha of non-remnant vegetation of which 659ha is high value regrowth.

- Provides habitat for three threatened fauna species, namely - Australian painted snipe (*Rostratula australis*) (V), purple crowned fairy-wren (*Malurus coronatus*) (V), gulf snapping turtle (*Elseya lavarackorum*) (V) and one threatened flora species, namely - *Fimbristylis micans* (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater Sawfish (*Pristis Pristis*) (V).
- The Carron and Norman River traverse the Haydon Hub. Marine plains represented provide significant habitat, feeding, nesting and roosting values, as well as providing spawning and nursery habitat for crocodiles and fish. Carron forest country contains tiny wetlands along the coolibah flats which has value as a large interconnected aggregation with significant diversity and longevity.

Julia Creek Hub

- Covers 12,271ha in area with representation of the following subregions - Central Downs - 3,724ha and Woondoola Plains - 8,547ha. These subregions have 0.22% and 0% levels of protection respectively.
- Provides representation of 10 regional ecosystems of two have no representation and the rest have low representation on the protected area estate.
- Provides habitat for two threatened fauna species, namely - Julia Creek dunnart (*Sminthopsis douglasi*) (E) and Australian painted snipe (*Rostratula australis*) (V).
- Julia Creek Hub falls within the Flinders catchment.

Karumba North Hub

- Covers 762,921ha in area with representation of the following subregions - Donors Plateau - 1,353ha, Karumba Plains - 396,237ha, Northern Holroyd Plain -3,125ha, Coastal Plains -1,349ha and Mitchell - Gilbert Fans - 360,855ha. These subregions have 0.06%, 1.3%, 8.12%, 25.86% and 6.67% levels of protection respectively.
- Provides representation of 32 regional ecosystems of which two have Of Concern VMA status, one has no representation and 28 have low representation on protected area estate.
- Provides habitat for nine threatened fauna species, namely - olive ridley turtle (*Lepidochelys olivacea*) (E), crimson finch (white-bellied subspecies) (*Neochmia phaeton evangelinae*) (E), estuarine crocodile (*Crocodylus porosus*) (V), beach stone-curlew (*Esacus magnirostris*) (V), flatback turtle (*Natator depressus*) (V), northern hopping-mouse (*Notomys aquilo*) (V), estuarine crocodile (*Crocodylus porosus*) (V), red goshawk (*Erythrotriorchis radiatus*) (E) and golden-shouldered parrot (*Psephotus chrysopterygius*) (E). Provides habitat for five threatened flora species, namely - *Astonia australiensis* (E), *Fimbristylis micans* (V), Cooktown orchid (*Dendrobium bigibbum*) (V), brown antelope orchid (*Dendrobium johannis*) (V) and *Stemona angusta* (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater Sawfish (*Pristis pristis*) (V).
- Several 'Directory of Important Wetlands' occur within the Hub, namely - Macaroni swamp, Mitchel River Fan aggregation, Northeast Karumba Plain aggregation, Smithburne-Gilbert Fan aggregation, Southeast Karumba Plain aggregation and Southern Gulf aggregation. There are five ecologically significant springs and the Alice, Gilbert, Nassau, Scrutton, Smithburne and South Mitchell rivers drain into this Hub.

Karumba South Hub

- Covers 675,359ha in area with representation of the following subregions - Karumba Plains -423,021ha, Armraynald Plains - 57,839ha, Donors Plateau - 90,389ha, Doomadgee Plains - 35,040ha and Woondoola Plains - 52,155ha. These subregions have 1.3%, 0.68%, 0.06%, 0% and 0% levels of protection respectively.
- Provides representation of 31 regional ecosystems of which two have Of Concern VMA status, 10 have no representation and 21 have low representation on protected area estate.
- Provides habitat for five threatened fauna species, namely - estuarine crocodile (*Crocodylus porosus*) (V), beach stone-curlew (*Esacus magnirostris*) (V), Australian painted snipe (*Rostratula australis*) (V), Gouldian finch (*Erythrura gouldiae*) (E) and purple-crowned fairy-wren (*Malurus coronatus*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater sawfish (*Pristis Pristis*) (V).
- The following Directory of Important Wetlands occur within the Hub - Buffalo Lake aggregation, Marless Lagoon aggregation, Nicholson Delta aggregation, Southern Gulf aggregation and Stranded Fish lake. The Albert, Bynoe, Leichhardt, Nicholson and Norman rivers drain into this Hub.

Lawn Hill Hub

- Covers 845,675ha in area with representation of the following subregions - McArthur - 27,649ha, Armraynald Plains - 190,105ha, Mount Isa Inlier - 81,660ha, Doomadgee Plains - 544,187ha and Thornton - 2,074ha. These subregions have 32.39%, 0.68%, 0%, 0% and 21.53% levels of protection respectively.
- Provides representation of 44 regional ecosystems of which five have Of Concern VMA status, 13 have no

- representation and 16 have low representation on protected area estate.
- Provides habitat for five threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), gulf snapping turtle (*Elseya lavarackorum*) (V), purple-crowned fairy-wren (*Malurus coronatus*) (V), purple-necked rock-wallaby (*Petrogale purpureicollis*) (V) and orange leaf-nosed bats (*Rhinonictoris aurantia*) (V). Provides habitat for two threatened flora species, namely - *Cycas brunnea* (V) and *Solanum carduiforme* (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater Sawfish (*Pristis Pristis*) (V).
- The following Directory of Important Wetlands occur within the Hub - Bluebush Swamp, Lawn Hill Gorge, Marless Lagoon aggregation, Musselbrook Creek aggregation, Nicholson Delta aggregation and Thornton aggregation. Two springs of high ecological value are present and the Gregory River traverses the Hub.

McArthur Hub

- Covers 39,400ha in area with representation of the following subregions - McArthur - 14,734ha and Doomadgee Plains -24,666ha. These subregions have 33.3% and 0% level of protection respectively.
- Provides representation of 24 regional ecosystems of which five have Of Concern VMA status, five have no representation and 18 have low representation on protected area estate.
- The Nicholson River traverses the Hub.

Mitchell River Corridor

- Covers 442,457ha with representation of the following subregions - Mitchell - Gilbert Fans -408,923ha, Holroyd Plain - Red Plateau - 20,473ha and Northern Holroyd Plain - 13,061ha. These subregions have 6.67%, 8.33% and 8.12% levels of protection respectively.
- Provides representation of 36 regional ecosystems of which 1 has Of Concern VMA Status, 1 has no representation and 30 have low representation on the protected area estate.
- Provides habitat for five threatened fauna species, namely - crimson finch (white-bellied subspecies) (*Neochmia phaeton evangelinae*) (E), golden-shouldered parrot (*Psephotus chrysopterygius*) (E), yakka skink (*Egernia rugosa*) (V), red goshawk (*Erythrotriorchis radiatus*) (E) and Australian painted snipe (*Rostratula australis*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Freshwater Sawfish (*Pristis Pristis*) (V).
- Provides habitat for five threatened flora species, namely - Cooktown orchid (*Dendrobium bigibbum*) (V), brown antelope orchid (*Dendrobium johannis*) (V), *Astonia australiensis* (E), *Stemona angusta* (V) and *Cycas cairnsiana* (V). Provides representation of the Directory of Important Wetland - Mitchell River Fan Aggregation - 315,166ha. The Alice, Mitchell, Palmer and Scrutton rivers traverse this Priority I area.

Pelham Hub

- Covers 365,596ha in area with representation of the following subregion - Claraville Plains which has no representation on protected area estate.
- Provides representation of 22 regional ecosystems of which, one has Endangered VMA status, 10 have no representation and 10 have low representation on protected area estate. Provides representation of EPBC listed threatened ecological community of native species dependent on natural discharges of groundwater from the Great Artesian Basin of 1,735ha.
- Provides habitat for three threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), Julia Creek dunnart (*Sminthopsis douglasi*) (E) and Australian painted snipe (*Rostratula australis*) (V) and one threatened flora species, namely - pink gidgee (*Acacia crombiei*) (V).
- Several Great Artesian springs occur within the Pelham Hub.

Strathmore Hub

- Covers 561,254ha in area with representation of the following subregion - Mitchell - Gilbert Fans - 262,023ha and Holroyd Plain - Red Plateau - 299,231ha. These subregions have 6.67% and 8.33% level of protection respectively.
- Provides representation of 26 regional ecosystems of which three have no representation and 19 have low representation on protected area estate.
- Provides habitat for five threatened fauna species, namely - golden-shouldered parrot (*Psephotus chrysopterygius*) (E), Gouldian finch (*Erythrura gouldiae*) (E) red goshawk (*Erythrotriorchis radiatus*) (E), Australian painted snipe (*Rostratula australis*) (V) and buff-breasted button-quail (*Turnix olivii*) (E).
- Provides habitat for eight threatened flora species, namely - *Stemona angusta* (V), *Euphorbia carissoides* (V), *Macropteranthes montana* (V), *Cycas cairnsiana* (V), *Cajanus mareebensis* (E), Cooktown orchid (*Dendrobium*

bigibbum) (V), *Lepturus minutus* (V) and *Astonia australiensis* (E). Habitat is also present for EPBC listed species, including one threatened fauna species, namely - Freshwater Sawfish (*Pristis Pristis*) (V) and one threatened flora species, namely - *Dichanthium setosum* (V).

- The Lynd, Red and Staaten rivers traverse Strathmore Hub.

Wellesley Islands Hub

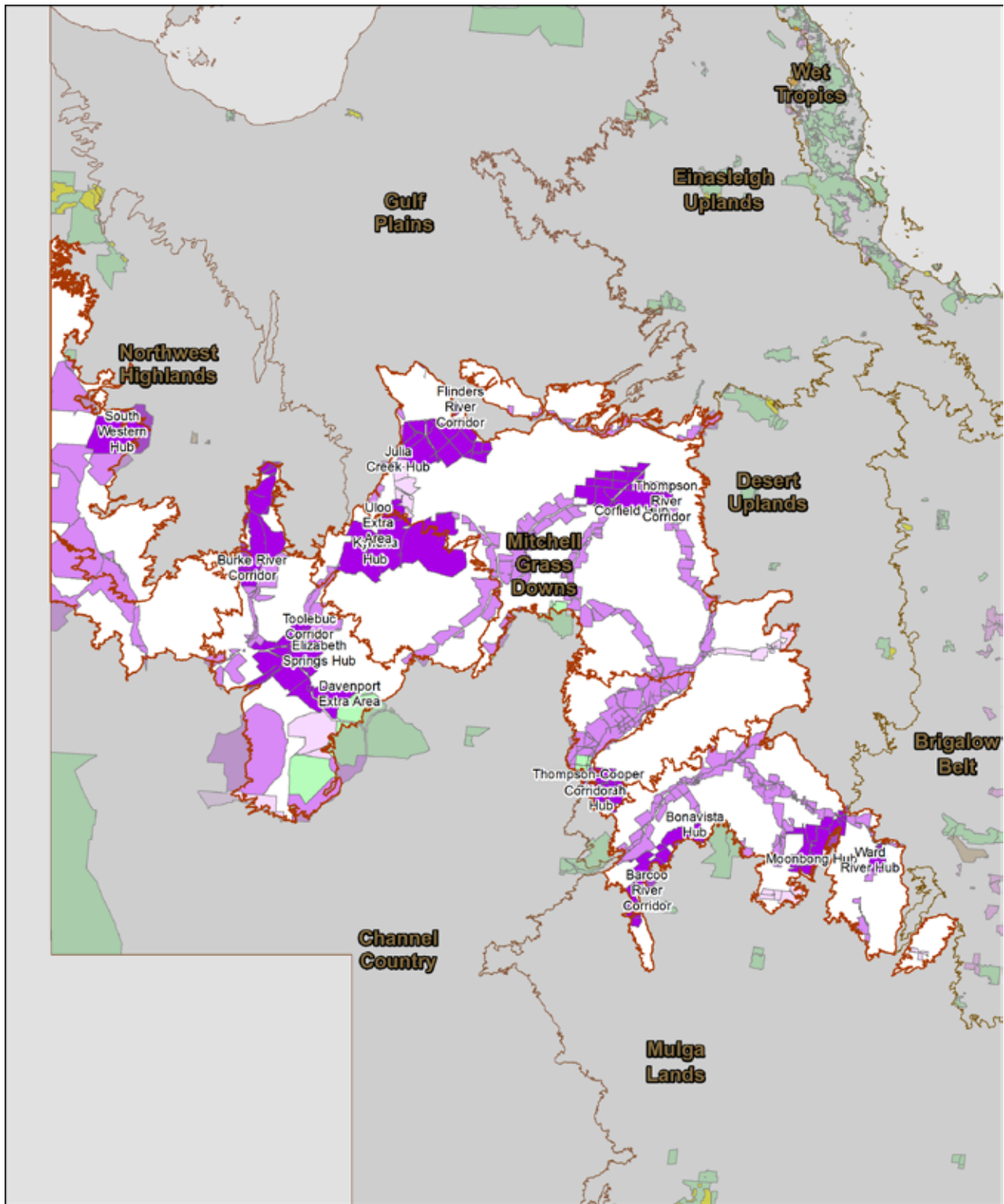
- Covers 118,628ha in area with representation of the Wellesley Islands subregion.
- Provides representation of 14 regional ecosystems of which one has Of Concern VMA status, five have no representation and eight have low representation on protected area estate.
- Provides habitat for three threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), beach stone-curlew (*Esacus magnirostris*) (V) and Australian painted snipe (*Rostratula australis*) (V), and for one threatened flora species, namely - *Paspalum multinodum* (V).
- Forsyth Island Wetlands that are Directory of Important Wetlands occur within the Hub. Elizabeth, Kungunmeah, Ngulwonmeah, Sandalwood place and Tabulbulan rivers traverse the Hub. Mornington and Wellesley islands occur within the Hub.

Wentworth Hub

- Covers 685,595ha in area with representation of the following subregions - Karumba Plains - 171,152ha, McArthur - 4,899ha and Doomadgee Plains - 509,544ha. These subregions have 1.3%, 33.3% and 0% level of protection respectively.
- Provides representation of 22 regional ecosystems of which two have Of Concern VMA status, four have no representation and 18 have low representation on protected area estate.
- Provides habitat for five threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), ghost bat (*Macroderma gigas*) (V), beach stone-curlew (*Esacus magnirostris*) (V), Australian painted snipe (*Rostratula australis*) (V) and purple-crowned fairy-wren (*Malurus coronatus*) (V).
- The following Directory of Important Wetlands occur within the Hub - Marless Lagoon aggregation, Southern Gulf aggregation and Wentworth aggregation.

Gulf Plains Priority 2 Areas

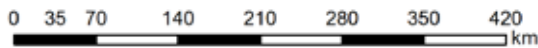
- Covers 5,07,432ha in area with representation of the following subregions - Mitchel-Gilbert Fans - 1,358,111ha, Northern Holroyd Plain - 13,061ha, Woondoola Plains - 917,075ha, Holroyd Plain - Red Plateau - 228,470ha, Doomadgee Plains - 6,231ha, Kidston - 9,350ha, Mount Isa Inlier - 20,665ha, Armraynald Plains - 740,115ha, Donors Plateau - 931ha, Gilberton Plateau - 457,185ha, Karumba Plains -1,379ha, Claraville Plains - 5,286ha, Georgetown - Croydon -23,267ha and Central Downs - 5,010ha. These subregions have 6.67%, 8.12%, 0%, 8.33%, 0%, 1.81%, 0%, 0.68%, 0.06%, 0.32%, 1.3%, 0%, 0%, 0% and .22%.
- Provides representation of 135 regional ecosystems of which one has Endangered VMA status, seven have Of Concern VMA status, 41 have no representation and 84 have low representation on protected area estate. There is 11,833ha of non-remnant vegetation. There is 276ha of EPBC threatened ecological community - community of native species dependent on natural discharge of groundwater from the Great Artesian Basin.
- Provides habitat for eight threatened fauna species, namely - Gouldian finch (*Erythrura gouldiae*) (E), crimson finch (white-bellied subspecies) (*Neochmia phaeton evangelinae*) (E), golden-shouldered parrot (*Psephotus chrysopterygius*) (E), Julia Creek dunnart (*Sminthopsis douglasi*) (E), gulf snapping turtle (*Elseya lavarackorum*) (V), koala (*Phascolarctos cinereus*) (V), purple-crowned fairy-wren (*Malurus coronatus*) (V) and purple-necked rock-wallaby (*Petrogale purpureicollis*) (V).
- Provides habitat for six threatened flora species, namely - *Drummondita calida* (V), *Macropteranthes montana* (V), *Solanum carduiforme* (V), *Stemona angusta* (V) *Oldenlandia spathulata* (E) and brown antelope orchid (*Dendrobium johannis*) (V). EPBC listed Freshwater Sawfish (*Pristis Pristis*) (V) is also located within these corridor areas.
- Provides representation of 44 high ecological value springs and the following Directory of Important Wetlands - Dorunda Lakes Area - 6,805ha, Gregory River - 9,140ha, Mitchell River Fan Aggregation - 315,166ha, Nicholson Delta Aggregation - 7,556ha and Smithburne- Gilbert Fan Aggregation - 144,294ha. The following rivers traverse the corridors - Alexandra, Alice, Barkly, Bynoe, Clara, Dugald, Flinders, Gilbert, Gregory, Leichhardt, Lynd, Norman, Palmer, Saxby, Scrutton, Smithbourne, Staaten, Stawell and Yappar rivers.



Mitchell Grass Downs
Strategic Investment
Offset Hubs



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Map 4: The Mitchell Grass Downs Bioregion strategic offset priority 1, 2 and 3 areas.

Mitchell Grass Downs Bioregion

Priority 1 Areas

Bimerah Hub

- Covers 132,955ha in area with representation of the following subregions - Central Downs - 91,217ha, Southern Wooded Downs - 39,195ha and Northern Uplands - 2,542ha. These subregions have 0.22%, 0.66% and 18.09% level of protection respectively.
- Provides representation of 20 regional ecosystems of which, one has Of Concern VMA status, two have no representation and 16 have low representation on the protected area estate. There is 1,333ha of non-remnant vegetation.
- Provides habitat for one threatened fauna species, namely - Major Mitchell's cockatoo (*Lophochroa leadbeateri*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Plains Death Adder (*Acanthophis hawkei*) (V).
- The Thomson River traverses the Bimerah Hub and the Hub is located in the Cooper Creek catchment.

Bonvista Hub

- Covers 132,096ha in area with representation of the following subregions - Southern Wooded Downs - 114,914ha and Northern Uplands - 11,249ha. These subregions have 0.66% and 18.09% level of protection respectively.
- Provides representation of 24 regional ecosystems of which one has Of Concern VMA status, two have no representation and 20 have low representation on the protected area estate. There is 27,767ha of non-remnant vegetation of which 350ha is of concern high value regrowth.
- Provides habitat for four threatened fauna species, namely - star finch (eastern subspecies) (*Neochmia ruficauda ruficauda*) (E), plains wanderer (*Pedionomus torquatus*) (V), Major Mitchell's cockatoo (*Lophochroa leadbeateri*) (V) and painted honeyeater (*Grantiella picta*) (V). Provides habitat for two threatened flora species, namely - *Indigofera oxyrachis* (V) and *Acacia ammophila* (V). Habitat is also present for EPBC listed species, including three threatened fauna species, namely - Plains Death Adder (*Acanthophis hawkei*) (V), yellow-footed rock-wallabies (*Petrogale xanthopus xanthopus*) (V) and Flinders Ranges mogurnda (*Mogurnda clivicola*) (V), and two threatened flora species, namely - *Xerothamnella parvifolia* (V) and *Sclerolaena walkeri* (V).
- This Hub is located within the Cooper Creek catchment and contains high ecological value springs.

Corfield Hub

- Covers 333,069ha in area with representation of the following subregion - Central Downs which has 0.22% level of protection.
- Provides representation of 14 regional ecosystems of which one has Of Concern VMA status, four have no representation and nine low representation on the protected area estate.
- Provides habitat for four threatened fauna species, namely - Julia Creek dunnart (*Sminthopsis douglasi*) (E), Gouldian finch (*Erythrura gouldiae*) (E), Australian painted snipe (*Rostratula australis*) (V) and painted honeyeater (*Grantiella picta*) (V) and two threatened flora species, namely - *Cycas cairnsiana* (V) and pink gidgee (*Acacia crombiei*) (V).
- Corfield Hub is located in the Cooper Creek, Diamantina and Flinders catchments.

Elisabeth Springs Hub

- Covers 338,507ha in area with representation of the following subregions - Southwestern Downs - 335,788ha and Georgina - Eyre Plains - 2,719ha. These subregions have 7.82% and 0% level of protection respectively.
- Provides representation of 30 regional ecosystem of which one has Endangered and one has Of concern VMA status, five have no representation and 25 have low representation on protected area estate. Provides representation of EPBC listed threatened ecological community - community of native species dependent on natural discharge of groundwater from the Great Artesian Basin -45ha.

- Provides habitat for five threatened fauna species, namely - plains wanderer (*Pedionomus torquatus*) (V), dusky hopping mouse (*Notomys fuscus*) (E), kowari (*Dasyuroides byrnei*) (V), greater bilby (*Macrotis lagotis*) (E), Elizabeth Springs goby (*Chlamydogobius micropterus*) (E). Provides habitat for four threatened flora species, namely - *Eriocaulon carsonii* (E), *Eriocaulon carsonii* subsp. *carsonii* (E), *Myriophyllum artesium* (E) and *Acacia peuce* (V).
- The Elisabeth Springs Hub falls within the Diamantina and Georgina catchments. The Hub contains the Directory of Important Wetlands - Elisabeth Springs - 353ha with 326 high ecological value springs. The Hamilton River traverses the Hub.

Julia Creek Hub

- Covers 375,514ha in area with representation of the following subregions - Central Downs - 373,670ha and Woondoola Plains - 1,844ha. These subregions have 0.22% and 0% level of protection respectively.
- Provides representation of 15 regional ecosystems of which, one has Of Concern VMA status, four have no representation and 11 have low representation on protected area estate. There is 20ha of non-remnant vegetation.
- Provides habitat for two threatened fauna species, namely - Julia Creek dunnart (*Sminthopsis douglasi*) (E) and yellow chat (gulf) (*Epthianura crocea crocea*) (V).
- Julia Creek Hub falls within the Flinders catchment and the Gilliat River traverses the Hub.

Kynuna Hub

- Covers 639,155ha in area with representation of the following subregions - Central Downs -66,681ha and Kynuna Plateau - 572,476ha. These subregions have 0.22% and 0% level of protection respectively.
- Provides representation of 28 regional ecosystems of which nine have no representation and 18 have low representation. There is 905ha of non-remnant vegetation.
- Provides habitat for five threatened fauna species, namely - Julia Creek dunnart (*Sminthopsis douglasi*) (E), plains wanderer (*Pedionomus torquatus*) (V), dusky hopping mouse (*Notomys fuscus*) (E), painted honeyeater (*Grantiella picta*) (V) and purple-necked rock-wallaby (*Petrogale purpureicollis*) (V).
- The Kynuna Hub falls within the Diamantina, Flinders and Georgina catchments with the Diamantina and Hamilton rivers traversing the Hub. The Hub contains 12 high ecological value springs.

Moonbong Hub

- Covers 190,960ha in area with representation of the following subregions - Southern Wooded Downs - 170,612ha, Jericho - 2,495ha and Langlo Plains - 17,853ha. These subregions have 0.66%, 1.76% and 0.67% level of protection respectively.
- Provides representation of 29 regional ecosystems of which one has endangered VMA Status, three have of concern VMA status, nine have no representation and 19 have low representation on the protected area estate. There is 72,733ha of non-remnant vegetation of which 3,907ha is of concern high value regrowth. There is 2ha of EPBC listed brigalow - a threatened ecological community.
- Provides habitat for three threatened fauna species, namely - koala (*Phascolarctos cinereus*) (V), Yakka skink (*Egernia rugosa*) (V), and painted honeyeater (*Grantiella picta*) (V). Provides habitat for two threatened flora species, namely - *Cyperus clarus* (V) and ooline (*Cadellia pentastylis*) (V). Habitat is also present for three EPBC listed threatened flora species, namely - *Xerothermella parvifolia* (V), *Bertya opponens* (V) and *Sclerolaena walkeri* (V).
- Moonbong Hub falls within the Bulloo, Cooper Creek and Warrego catchments and the Barcoo River traverses the Hub. There are three high ecological value springs located within the Hub.

South Western Hub

- Covers 278,120ha in area, with representation of the following subregions - Southwestern Plateaus and Floodouts - 76,833ha and Barkly Tableland - 201,286ha. These subregions have 0.85% and 0.14% level of protection respectively.
- Provides representation of 30 regional ecosystems of which nine have no representation and 19 have low representation on the protected area estate.
- Provides habitat for six threatened fauna species, namely - Australian painted snipe (*Rostratula australis*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), ghost bat (*Macroderma gigas*) (V), purple-necked rock wallaby (*Petrogale purpureicollis*) (V) and painted honeyeater (*Grantiella picta*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Carpentarian antechinus (*Pseudantechinus mimulus*) (V).
- The Templeton River traverses the Hub and the Hub falls within the Georgina catchment.

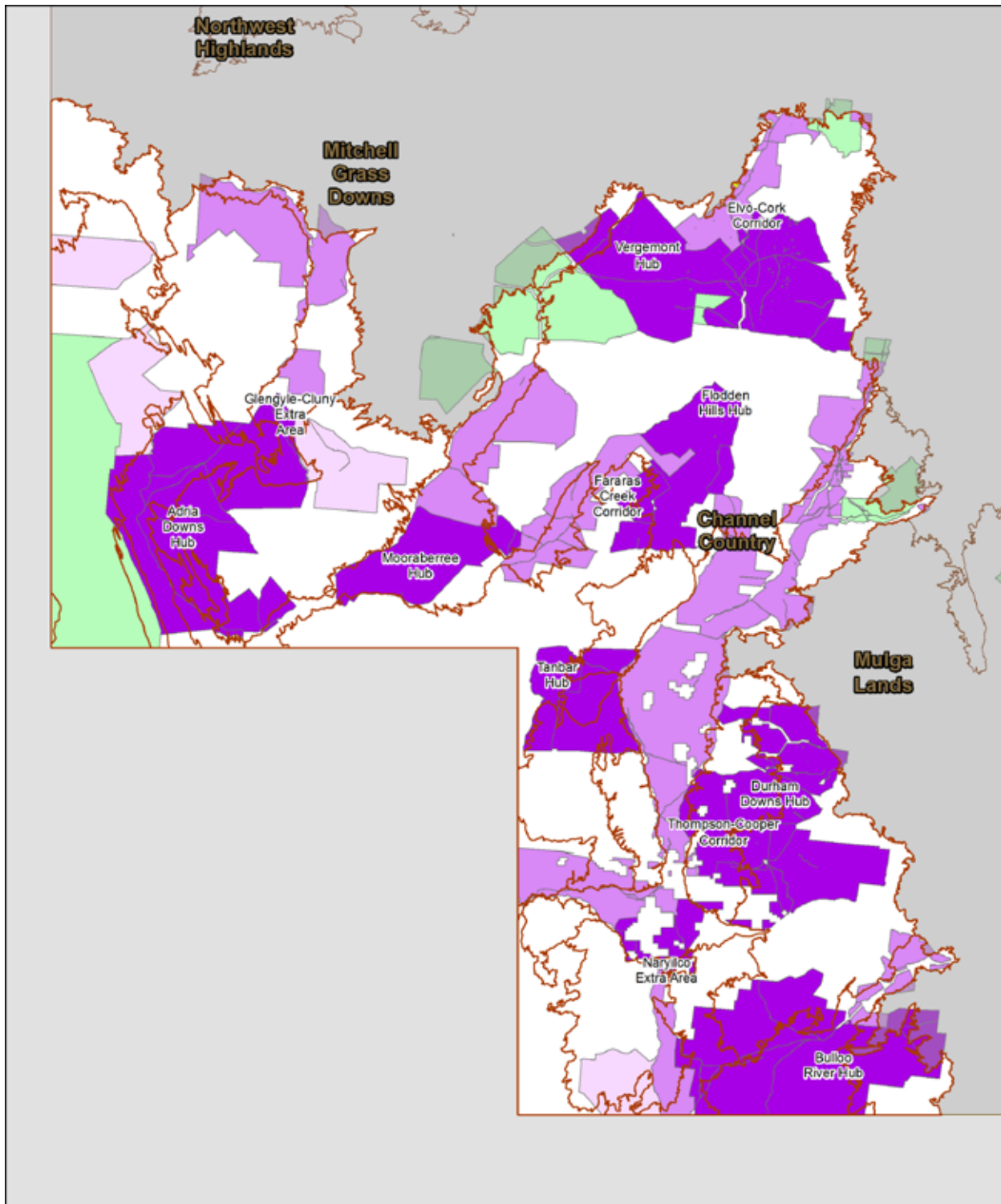
- Hub falls within the Cooper Creek and Warrego catchments and Ward River traverses the Hub.

Mitchell Grass Downs Priority 2 Areas

- Covers 4,844,171ha in area with representation of the following subregions - Undara-Toomba Basalts - 2,407ha, Langlo Plains - 2,407ha, Toko Plains - 51,234ha, Georgina Limestone - 307,039ha, Flinders - 84,552ha, Southern Downs - 2,481ha, Southwestern Downs - 1,057,804ha, Claraville Plains - 1,164ha, Barkly Tableland - 719,700ha, Sturt Stony Desert - 12,893ha, Central Downs - 927,367ha, Southwestern Plateaus and Floodouts - 41,225ha, Prairie-Torrens Creeks Alluvials - 13,801ha, Jericho - 385ha, Goneaway Tablelands - 20,188ha, Northern Uplands - 26,636ha, Woondoola Plains - 7,417ha, Kynuna Plateau - 180,292ha, Georgina - Eyre Plains - 201,459ha, Cooper-Diamantina Plains - 1,296ha, Southern Wooded Downs - 1,056,167ha, Mount Isa Inlier - 24,256ha and Alice Tableland - 247ha.
- Provides representation of 167 regional ecosystems of which 10 have Of Concern VMA status, 45 have no representation, and 110 have low representation on protected area estate. There is 1,789ha of Of Concern high value regrowth and 419ha of Weeping Myall Woodlands EPBC listed threatened ecological community present.
- Provides habitat for 14 threatened fauna species, namely - Edgbaston goby (*Chlamydogobius squamigenus*) (E), star finch (eastern subspecies) (*Neochmia ruficauda ruficauda*) (E), greater bilby (*Macrotis lagotis*) (E), Julia Creek dunnart (*Sminthopsis douglasi*) (E), kowari (*Dasyuroides byrnei*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), squatter pigeon (southern subspecies) (*Geophaps scripta scripta*) (V), painted honeyeater (*Grantiella picta*) (V), Major Mitchell's cockatoo (*Lophochroa leadbeateri*) (V), ghost bat (*Macroderma gigas*) (V), plains-wanderer (*Pedionomus torquatus*) (V), koala (*Phascolarctos cinereus*) (V), orange leaf-nosed bat (*Rhinonicteris aurantia*) (V) and grey falcon (*Falco hypoleucos*) (V). Provides habitat for six threatened flora species, namely - pink gidgee (*Acacia crombiei*) (V), waddy wood (*Acacia peuce*) (V), *Eremophila tetraptera* (V), *Hakea maconochieana* (V), *Rhaphidospora bonneyana* (V) and *Calotis suffruticosa* (E).
- These corridors also provide habitat for EPBC listed species, including four threatened fauna species, namely - Plains Death Adder (*Acanthopis hawkei*) (V), Murray Cod (*Maccullochella peelii*) (V), Flinders Ranges mogurnda (*Mogurnda clivicola*) (V) and Freshwater Sawfish (*Pristis pristis*) (V), and two threatened flora species, namely - bluegrass (*Dichanthium setosum*) (V) and *Xerothamnella parvifolia* (V).
- These corridors provide representation of 18 high ecological value springs and the following Directory of Important Wetlands - Austral Limestone Aggregation - 18,608ha, Georgina River - King Creek Floodout - 52,586ha and Toko Gorge and Waterhole - 76ha. The following rivers are key components of these corridors - Alice, Barcoo, Burke, Darr, Diamantina, Dutton, Flinders, Georgina, Hamilton, Malbon, Mort, Templeton, Thomson and Western.

Mitchell Grass Downs Priority 3 Areas

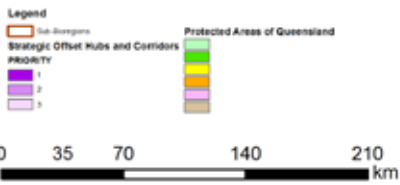
- Covers 395,759 ha in area with representation of the following subregions; North Eastern Plains, Prairie - Torrens Creeks Alluvials, Sturt Stony Desert, Kynuna Plateau, Georgina - Eyre Plains, Central Downs, Southern Wooded Downs, Langlo Plains, Alice Tableland, Northern Uplands, Southwestern Downs.
- The extra areas provide representation of 86 regional ecosystems, of which five have Of Concern VMA status. Eighteen of these have no representation, and 65 have low representation in the protected area estate. They also contain 276ha of Of Concern high value regrowth.
- Provide habitat for six threatened fauna species, namely - Edgbaston goby (*Chlamydogobius squamigenus*) (E), greater bilby (*Macrotis lagotis*) (E), eastern star finch (*Neochmia ruficauda ruficauda*) (E), redfin blue eye (*Scaturiginichthys vermeilipinnis*) (E), kowari (*Dasyuroides byrnei*) (V) and koala (*Phascolarctos cinereus*) (V).
- Provides habitat for 10 threatened flora species, namely - *Eriocaulon aloefolium* (E), *Eriocaulon carsonii* (E), *Eriocaulon carsonii* subsp. *Orientalis* (E), *Eriocaulon giganticum* (E), *Eryngium fontanum* (E), *Myriophyllum artesium* (E), *Sporobolus pamelae* (E), *Atriplex morrisii* (V), *Hydrocotyle dippleura* (V) and *Rhaphidospora bonneyana* (V).
- Habitat is also present for one EPBC listed threatened flora species, namely - *Sclerolaena walkeri* (V).
- Two wetlands listed in the Directory of Important Wetlands, Aramac Springs (399 ha) and the King Creek Floodout of the Georgina River (13,591 ha), occur within the Mitchell Grass Downs SOIC extra areas.



Channel Country
Strategic Investment
Offset Hubs



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Map 5: The Channel Country Bioregion strategic offset priority 1, 2 and 3 areas.

Channel Country Bioregion

Priority 1 Areas

Adria Downs Hub

- Covers 1,329,304ha in area with representation of the following subregions - Dieri - 116,713ha, Cooper-Diamantina Plains - 15,110ha, Sturt Stony Desert - 506,985ha, Simpson Desert - 60,413ha and Georgina - Eyre Plains - 542,919ha. These subregions currently have 31.13%, 6.36%, 0%, 47.31% and 0% levels of protection respectively.
- Provides representation of 31 thirty-one regional ecosystems of which one has Of Concern VMA Status, nine have no representation and 22 twenty-two have low on protected area estate. There is 30ha of non-remnant vegetation.
- Provides habitat for seven threatened fauna species, namely - greater bilby (*Macrotis lagotis*) (E), kowari (*Dasyuroides byrnei*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), Australian painted snipe (*Rostratula australis*) (V), dusky hopping mouse (*Notomys fuscus*) (E), Crest-tailed Mulgara (*Dasycercus cristicauda*) (V), plains wanderer (*Pedionomus torquatus*) (V) and habitat for one threatened flora species, namely - waddy wood (*Acacia peuce*) (V). Habitat is also present for one EPBC listed threatened flora species, namely - *Sclerolaena walkeri* (V).
- A suite of migratory species breed on the lakes in this hub, including Asian breeding species such as Little Curlew and Sharp-tailed sandpiper, colonies of eastern great egret. Important aggregation sites for freckled ducks occur at the most persistent lakes.
- Lake Mipia, Lake Machattie, Lake Torquinie, Cawallrie Waterhole and Muncoonie Lakes fall within Adria Downs Hub, as well as Bilpa Morea Claypan. The wetlands are all significant waterbird breeding sites. The Diamantina and Mulligan rivers traverse the Hub.
- Adria Downs Hub is adjacent to Munga-Thirri National Park.

Bulloo River Hub

- Covers 1,296,042ha in area with representation of the following subregions - Urisino Sandplains - 110,450ha, Noccundra Slopes - 284,381ha, Bulloo - 556,891ha, Sturt Stony Desert - 126,566ha, Bulloo Dunefields - 200,571ha and West Bulloo - 4,138ha. These subregions currently have 3.73%, 0%, 0%, 0%, 0% and 0% levels of protection respectively.
- Provides representation of 32 regional ecosystems of which one has Of Concern VMA status, three have no representation and 29 have low representation on protected area estate. There is 73ha of non-remnant vegetation.
- Provides habitat for seven threatened fauna, namely - dusky hopping-mouse (*Notomys fuscus*) (E), Australian painted snipe (*Rostratula australis*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), Major Mitchell's cockatoo (*Lophochroa leadbeateri*) (V), plains-wanderer (*Pedionomus torquatus*) (V), grey grasswren (Bulloo) (*Amytornis barbatus barbatus*) (E), grey falcon (*Falco hypoleucos*) (V) and habitat for two threatened flora, namely - *Acacia ammophila* (V) and *Grevillea kennedyana* (V). Habitat is also provided for EPBC listed one threatened fauna species, namely - Australasian Bittern (E) and one threatened flora species, namely - *Sclerolaena walkeri* (V).
- Lake Bulloo (which is the stronghold for the grey grasswren, Lake Bullawarra, Nooyeah Downs Swamps Aggregation and wetlands of the Paroo Sand sheets occur within this Hub. These wetlands provide a diversity of wetland habitats including salt, hyposaline and freshwater lakes, blackbox swamps and claypans. Large colonies of waterbirds including JAMBA and CAMBA listed migratory species utilise the more permanent lakes throughout most years. Bulloo River traverses this Hub. Preliminary surveys indicate that tens of thousands of waterbirds occur as the wetlands dry out.

Durham Downs Hub

- Covers 873,576ha in area with representation of the following subregions - West Bulloo - 15,740ha, Cooper-Diamantina Plains - 52,743ha, Noccundra Slopes - 622,358ha, Sturt Stony Desert - 42ha and Bulloo Dunefield - 539ha. These subregions currently have 0%, 6.36%, 0%, 0% and 0% levels of protection respectively.
- Provides representation of 38 regional ecosystems of which three have no representation and 33 have low representation on protected area estate. There is 231ha of non-remnant vegetation.

- Provides habitat for five threatened fauna species, namely - grey grasswren (Bulloo) (*Amytornis barbatus barbatus*) (E), plains-wanderer (*Pedionomus torquatus*) (V), dusky hopping mouse (*Notomys fuscus*) (E), yellow chat (gulf) (*Epthianura crocea crocea*) (V) and Major Mitchell cockatoo (*Lophochroa leadbeateri*) (V). Provides habitat for two threatened flora species, namely - *Acacia ammophila* (V) and *Indigofera oxyrachis* (V). Habitat is also present for two EPBC listed threatened flora species, namely - *Xerothamnella parvifolia* (V) and *Sclerolaena walkeri* (V).
- The Nationally listed wetlands; Cooper Creek - Wilson River Junction and Cooper Creek Swamps - Nappa Merrie occurs within the Hub and Wilson River runs through the Hub. Tens of thousands of waterbirds occur with many breeding in floodplain wetlands during major flood events.

Flodden Hills Hub

- Covers 431,305ha in area with representation of the following subregions - Lake Pure - 2,968ha, Sturt Stony Desert - 44,680ha and Goneaway Tablelands - 383,657ha. These subregions currently have 0%, 0% and 6.23% levels of protection respectively.
- Provides representation of 35 regional ecosystems of which four have no representation and 27 have low representation on protected area estate. There is 109ha of non-remnant vegetation.
- Provides habitat for six threatened fauna species, namely - dusky hopping mouse (*Notomys fuscus*) (E), yellow chat (gulf) (*Epthianura crocea crocea*) (V), painted honeyeater (*Grantiella picta*) (V), plains wanderer (*Pedionomus torquatus*) (V), Australian painted snipe (*Rostratula australis*) (V) and Major Mitchell cockatoo (*Lophochroa leadbeateri*) (V). Habitat is also present for one EPBC listed threatened fauna species, namely - Plains Death Adder (*Acanthophis hawkei*) (V).
- Flodden Hills Hub falls within the Cooper Creek and Diamantina catchments.

Mooraberree Hub

- Covers 425,791ha in area with representation of the following subregions - Sturt Stony Desert - 6,870ha, Cooper-Diamantina Plains - 376,452ha and Goneaway Tablelands - 40,803ha. These subregions currently have 0%, 6.36% and 6.23% levels of protection respectively.
- Provides representation of 25 regional ecosystems of which four have no representation and 20 have low representation on protected area estate. There is 22 ha of non-remnant vegetation.
- Provides habitat for six threatened fauna species, namely - dusky hopping-mouse (*Notomys fuscus*) (E), greater bilby (*Macrotis lagotis*) (E), plains wanderer (*Pedionomus torquatus*) (V), kowari (*Dasyuroides byrnei*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V) and Australian painted snipe (*Rostratula australis*) (V). Habitat is also provided for one EPBC listed threatened flora species, namely - *Sclerolaena walkeri* (V). Several EPBC listed migratory waterbirds occur in large numbers. Breeding colonies of waterbirds with up to 50,000 pairs and regular mixed species colonies that include large numbers of glossy ibis and eastern great egrets.
- The Birdsville - Durrie Waterhole aggregation and Diamantina Overflow swamp occur within Mooraberree Hub.

Tanbar Hub

- Covers 156,412ha in area with representation of the following subregions - Sturt Stony Desert - 91,849ha, Cooper - Diamantina Plains - 9,303ha and Lake Pure - 44,667ha. These subregions currently have 0%, 6.36% and 0% levels of protection respectively.
- Provides representation of 17 regional ecosystems of which one has no representation and 15 have low representation on protected area estate.
- Provides habitat for four threatened fauna species, namely - dusky hopping mouse (*Notomys fuscus*) (E), plains wanderer (*Pedionomus torquatus*) (V), Australian painted snipe (*Rostratula australis*) (V) and yellow chat (gulf) (*Epthianura crocea crocea*) (V). Habitat is also present for two EPBC listed threatened flora species, namely - *Xerothamnella parvifolia* (V) and *Sclerolaena walkeri* (V).
- Provides habitat for waterbirds. Lake Yamma Yamma occurs within this Hub, which is an important breeding site for pelicans and over-wintering site for the white-winged black tern and sharp-tailed sandpiper.

Vergemont Hub

- Covers 1,115,380ha in area with representation of the following subregions - Kynuna Plateau -139ha, Cooper-Diamantina Plains - 49,578ha, Goneaway Tablelands - 1,039,565ha and Southwestern Downs - 26,099ha. These subregions currently have 0%, 6.36%, 6.23% and 7.82% levels of protection respectively.
- Provides representation of 49 regional ecosystems of which four have no representation and 39 have low representation on the protected area estate.

- Provides habitat for three threatened fauna species, namely - grey falcon (*Falco hypoleucos*) (V), potential habitat for the night parrot (*Pezoporus occidentalis*) (E) and purple-necked rock-wallaby (*Petrogale purpureicollis*) (V). Provides habitat for one threatened flora species, namely - *Eremophila tetraptera* (V). Habitat is also present for one EPBC listed threatened flora species, namely - *Sclerolaena walkeri* (V).
- Several ecologically significant springs occur within the Vergemont Hub and the Diamantina River traverses the Hub.

Channel Country Priority 2 Areas

- Covers 4,057,145ha in area with representation of the following subregions - Coongie - 1,608ha, Noccundra Slopes - 69,050ha, Goneaway Tablelands - 951,429ha, Georgina - Eyre Plains - 249,526ha, West Bulloo - 13,855ha, Cooper-Diamantina Plains - 1,283,054ha, Georgina Limestone - 6,933ha, Central Downs - 12,904ha, Southern Wooded Downs - 9,227ha, Lake Pure - 190,027ha, Northern Uplands - 1,180ha and Southwestern Downs - 22,926ha. These subregions have 0%, 0%, 6.23%, 0%, 0%, 6.36%, 0%, .22%, .66%, 0%, 18.09% and 7.82% level of protection respectively.
- Provides representation of 86 regional ecosystems of which one has Of Concern VMA status, 18 have no representation and 62 have low representation on the protected area estate. There is 2,866ha of non-remnant vegetation.
- Provides habitat for 10 threatened fauna species, namely - greater bilby (*Macrotis lagotis*) (E), dusky hopping mouse (*Notomys fuscus*) (E), kowari (*Dasyuroides byrnei*) (V), yellow chat (gulf) (*Epthianura crocea crocea*) (V), plains wanderer (*Pedionomus torquatus*) (V), purple-necked rock-wallaby (*Petrogale purpureicollis*) (V), Australian painted snipe (*Rostratula australis*) (V), waddy wood (*Acacia peuce*) (V), grey grasswren (Bulloo) (*Amytornis barbatus barbatus*) (E), and grey falcon (*Falco hypoleucos*) (V). Provides habitat for one threatened flora species, namely - *Calotis suffruticosa* (E).
- Six ecologically significant springs occur in the corridors. The following Directory of Important Wetlands - Cooper Creek - Wilson River junction - 46ha, Cooper Creek Overflow Swamps- Windorah - 103,801ha, Cooper Creek Swamps - Nappa Merrie -87,042ha, Georgina River - King Creek Floodout - 65,526ha and Lake Yamma Yamma - 77,838ha. The following rivers are key wildlife refugia - Cooper Creek, Diamantina, Georgina, Hamilton, Mayne, and Wilson.

Channel Country Priority 3 Areas

- Covers 1,223,648 ha in area with representation of the following subregions; Simpson Desert, Strzelecki Desert, Sturt Stony Desert, Georgina - Eyre Plains, Cooper - Diamantina Plains, Toko Plains and Bullo Dunefields.
- The extra areas provide representation of 35 regional ecosystems, of which two have Of Concern VMA status. Eight of these have no representation, and 25 have low representation in the protected area estate.
- Provides habitat for five threatened fauna species, namely - brush-tailed mulgara (*Dasyercus blythi*) (V), crest-tailed mulgara (*Dasyercus cristicauda*) (V), kowari (V), yellow chat (gulf) (V) and grey grasswren (Bulloo) (E) and one threatened flora species, namely - *Grevillea kennedyana* (V).
- Habitat is also present for one EPBC listed threatened flora species, namely - *Sclerolaena walkeri* (V).
- Five wetlands listed in the Directory of Important Wetlands (the Cooper Creek - Wilson River junction (18,644 ha), Cooper Creek Swamps, Nappa Merrie (882 ha), Lake Mipia area (28,884 ha), Lake Torquinie area ((10,033 ha), and the Mulligan River - Wheeler Creek Junction (1286 ha)), occur within the Channel Country SOIC extra areas.