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### **Supplementary Material**

#### **A decision support tool for habitat connectivity in Australia**

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Table S1: The relevant spatial datasets found during the systematic search of online government and non-governmental databases.

Dataset name	Authors	Year	Area	Link/Source
Intact Forest Landscape	Potapov et al.	2017	Global	<a href="https://advances.sciencemag.org/content/3/1/e1600821/ta-b-figures-data">https://advances.sciencemag.org/content/3/1/e1600821/ta-b-figures-data</a>
Global Safety Net (3 layers including wildlife corridors)	Dinerstein et al.	2020	Global	<a href="https://www.globalsafetynet.app/viewer/">https://www.globalsafetynet.app/viewer/</a>
Natural and Modified Habitat Screening Layer	Gosling et al.	2020	Global	<a href="https://www.sciencedirect.com/science/article/pii/S0006320720307321">https://www.sciencedirect.com/science/article/pii/S0006320720307321</a>
Forest Landscape Integrity Index	Grantham et al.	2020	Global	<a href="https://www.nature.com/articles/s41467-020-19493-3">https://www.nature.com/articles/s41467-020-19493-3</a>
Global Forest Canopy Height	Potapov et al.	2019	Global	<a href="https://glad.umd.edu/dataset/gedi/">https://glad.umd.edu/dataset/gedi/</a>
Global Forest Change (% cover, loss and gain)	Hansen et al.	2013*	Global	<a href="https://storage.googleapis.com/earthenginepartners-hansen/GFC-2020-v1.8/download.html">https://storage.googleapis.com/earthenginepartners-hansen/GFC-2020-v1.8/download.html</a>
OpenStreetMap roads	OpenStreetMap contributors	2021	Global	<a href="https://download.geofabrik.de/">https://download.geofabrik.de/</a>
Global Human Modification of Terrestrial Systems	Kennedy et al.	2020	Global	<a href="https://sedac.ciesin.columbia.edu/data/set/hulc-human-modification-terrestrial-systems">https://sedac.ciesin.columbia.edu/data/set/hulc-human-modification-terrestrial-systems</a>
Forest Carbon Emissions	Harris et al.	2021	Global	<a href="https://doi.org/10.1038/s41558-020-00976-6">https://doi.org/10.1038/s41558-020-00976-6</a>
Collaborative Australian Protected Areas Database	Australian Government	2020	National	<a href="http://www.environment.gov.au/land/nrs/science/capad">http://www.environment.gov.au/land/nrs/science/capad</a>
Natural areas of Australia - 100 metre	Australian Government	2001	National	-
Forests of Australia (2018)	Australian Government	2018	National	<a href="https://data.gov.au/data/dataset/forests-of-australia-2018">https://data.gov.au/data/dataset/forests-of-australia-2018</a>
2016 SoE Land Extent of all forms of vegetation across Australia	Australian Government	2009	National	<a href="https://data.gov.au/dataset/ds-dga-09a696f2-b55f-4690-aeff-a956d71e569d/details">https://data.gov.au/dataset/ds-dga-09a696f2-b55f-4690-aeff-a956d71e569d/details</a>
Dynamic Land Cover Dataset	Geoscience Australia	2010	National	<a href="https://data.gov.au/data/dataset/1556b944-731c-4b7f-a03e-14577c7e68db">https://data.gov.au/data/dataset/1556b944-731c-4b7f-a03e-14577c7e68db</a>
Species of National Environmental Significance Distributions	Australian Government	2021	National	<a href="https://www.environment.gov.au/fed/catalog/search/resource/details.page?uuid=%7B337B05B6-254E-47AD-A701-C55D9A0435EA%7D">https://www.environment.gov.au/fed/catalog/search/resource/details.page?uuid=%7B337B05B6-254E-47AD-A701-C55D9A0435EA%7D</a>

National Vegetation Information System (NVIS) groups and subgroups	Australian Government	2020	National	<a href="https://www.environment.gov.au/land/native-vegetation/national-vegetation-information-system/data-products">https://www.environment.gov.au/land/native-vegetation/national-vegetation-information-system/data-products</a>
National Surface Water Information (streamlines and hydrology polygons)	Australian Government	2015	National	<a href="https://www.ga.gov.au/scientific-topics/national-location-information/national-surface-water-information">https://www.ga.gov.au/scientific-topics/national-location-information/national-surface-water-information</a>
GEOSS ecosystem map (structural vegetation classes, ecosystems and landforms)	TERN	2017	National	<a href="http://data.auscover.org.au/x/wiki/bin/view/Product+pages/WebHome">http://data.auscover.org.au/x/wiki/bin/view/Product+pages/WebHome</a>
GEEBAM fire severity	Australian Government	2020	National	<a href="http://www.environment.gov.au/fed/catalog/search/resource/details.page?uuid=%7B8CE7D6BE-4A82-40D7-80BC-647CB1FE5C08%7D">http://www.environment.gov.au/fed/catalog/search/resource/details.page?uuid=%7B8CE7D6BE-4A82-40D7-80BC-647CB1FE5C08%7D</a>
3C Modelling for Biodiversity under Future Climate (multiple layers including current and future habitat linkages)	NSW Government	2015	NSW, Vic, ACT and parts of SA and QLD	<a href="https://www.terranova.org.au/repository/3c-modelling-east-coast-central-slopes-and-murray-basin-nrm-collection/draft-report-3c-modelling-for-biodiversity-management-under-future-climate">https://www.terranova.org.au/repository/3c-modelling-east-coast-central-slopes-and-murray-basin-nrm-collection/draft-report-3c-modelling-for-biodiversity-management-under-future-climate</a>
Canberra vegetation structure	ACT Government	2015	Canberra	<a href="https://data.actmapi.act.gov.au/arcgis/rest/services/data_extract/Environment/MapServer/8">https://data.actmapi.act.gov.au/arcgis/rest/services/data_extract/Environment/MapServer/8</a>
ACT Vegetation Map 2018	ACT Government	2018	ACT	<a href="https://actmapi-actgov.opendata.arcgis.com/datasets/act-vegetation-map-2018/explore?location=-35.522100%2C149.086000%2C10.39">https://actmapi-actgov.opendata.arcgis.com/datasets/act-vegetation-map-2018/explore?location=-35.522100%2C149.086000%2C10.39</a>
Transitional Native Vegetation Regulatory Map	NSW Government	2017	NSW	<a href="https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/native-vegetation-regulatory-map">https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/native-vegetation-regulatory-map</a>
Persistence of ecosystems (including undiscovered species) (vascular plants)	NSW Government	2018	NSW	<a href="https://datasets.seed.nsw.gov.au/dataset/persistence-of-ecosystems-vascular-plants">https://datasets.seed.nsw.gov.au/dataset/persistence-of-ecosystems-vascular-plants</a>
Ecological connectivity of terrestrial habitat	NSW Government	2018	NSW	<a href="https://datasets.seed.nsw.gov.au/dataset/ecological-connectivity-of-terrestrial-habitat">https://datasets.seed.nsw.gov.au/dataset/ecological-connectivity-of-terrestrial-habitat</a>
NSW Interim Native Vegetation Extent (2008-v2)	NSW Government	2008	NSW	<a href="https://datasets.seed.nsw.gov.au/dataset/nsw-interim-native-vegetation-extent-2008-v2-c3f8e">https://datasets.seed.nsw.gov.au/dataset/nsw-interim-native-vegetation-extent-2008-v2-c3f8e</a>
NSW Land Use	NSW Government	2017 (updated 2020)	NSW	<a href="https://datasets.seed.nsw.gov.au/dataset/nsw-landuse-2017-v1p2-f0ed">https://datasets.seed.nsw.gov.au/dataset/nsw-landuse-2017-v1p2-f0ed</a>

NSW State Vegetation Type Map	NSW Government	NA	NSW	<a href="https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map">https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map</a>
Key Habitats and Corridors (multiple polygon and raster layers)	NSW Government	2000- 2007	NE NSW	<a href="https://data.gov.au/data/dataset/c8b21575-8003-41ba-bb7e-378c2eb3486d">https://data.gov.au/data/dataset/c8b21575-8003-41ba-bb7e-378c2eb3486d</a>
Climate Change Corridors for North East NSW (multiple polygon and raster layers)	NSW Government	2007	NE NSW	<a href="https://datasets.seed.nsw.gov.au/dataset/climate-change-corridors-coastal-habitat-for-north-east-nsw">https://datasets.seed.nsw.gov.au/dataset/climate-change-corridors-coastal-habitat-for-north-east-nsw</a>
High Environmental Value for Hunter Regional Growth Planning area - detailed	NSW Government	2016	Hunter	<a href="https://datasets.seed.nsw.gov.au/dataset/high-environmental-value-for-hunter-regional-growth-planning-area-detailedf00dd">https://datasets.seed.nsw.gov.au/dataset/high-environmental-value-for-hunter-regional-growth-planning-area-detailedf00dd</a>
Remnant Vegetation of the western Cumberland subregion	NSW Government	2013	Cumberland Plain	<a href="https://datasets.seed.nsw.gov.au/dataset/remnant-vegetation-of-the-western-cumberland-subregion-2013-update-vis_id-4207fd1f4">https://datasets.seed.nsw.gov.au/dataset/remnant-vegetation-of-the-western-cumberland-subregion-2013-update-vis_id-4207fd1f4</a>
Southern CRA - Riverina Highlands Mapping Extension, Biolinks	NSW National Parks and Wildlife Service	2003	NSW Riverina Highlands	<a href="https://datasets.seed.nsw.gov.au/dataset/southern-cra-riverina-highlands-mapping-extension">https://datasets.seed.nsw.gov.au/dataset/southern-cra-riverina-highlands-mapping-extension</a>
Southeast and Tablelands Regional Plan Corridors	NSW Government	2017	NSW South East and Tablelands	<a href="https://datasets.seed.nsw.gov.au/dataset/http-webmap-environment-nsw-gov-au-planninghtml5viewer-viewer-seat-corridors">https://datasets.seed.nsw.gov.au/dataset/http-webmap-environment-nsw-gov-au-planninghtml5viewer-viewer-seat-corridors</a>
Northern Territory Vegetation Survey data (large number of surveys resulting in numerous spatial datasets)	Northern Territory Government	-	NT	<a href="https://data.nt.gov.au/dataset?q=vegetation+surveys&amp;res_format=ESRI+Shape+file&amp;sort=score+desc%2C+metadata_modified+desc">https://data.nt.gov.au/dataset?q=vegetation+surveys&amp;res_format=ESRI+Shape+file&amp;sort=score+desc%2C+metadata_modified+desc</a>
Landcover Veg Mapping Greater Darwin Region	Northern Territory Government	2019	NT	<a href="https://data.nt.gov.au/dataset/landcover-veg-mapping-greater-darwin-region">https://data.nt.gov.au/dataset/landcover-veg-mapping-greater-darwin-region</a>
Remnant vegetation cover - 2019	QLD Government	2019	QLD	<a href="https://www.data.qld.gov.au/dataset/remnant-vegetation-cover-2019-queensland">https://www.data.qld.gov.au/dataset/remnant-vegetation-cover-2019-queensland</a>
Corridor identification through the Biodiversity Planning Assessments (multiple spatial layers)	QLD Government	2020	QLD	<a href="https://www.data.qld.gov.au/dataset/queensland-statewide-corridors">https://www.data.qld.gov.au/dataset/queensland-statewide-corridors</a>
Mature regrowth	QLD Government	2019	QLD	<a href="https://www.data.qld.gov.au/dataset/environmental-protection-act-mature-regrowth/resource/4c8a8c90-78b8-491c-8d78-749771a4a4ca">https://www.data.qld.gov.au/dataset/environmental-protection-act-mature-regrowth/resource/4c8a8c90-78b8-491c-8d78-749771a4a4ca</a>
Regional Ecosystems	QLD Government	2019	QLD	<a href="https://www.data.qld.gov.au/dataset/biodiversity-status-of-pre-clearing-and-2019-remnant-regional-ecosystems-queensland-series">https://www.data.qld.gov.au/dataset/biodiversity-status-of-pre-clearing-and-2019-remnant-regional-ecosystems-queensland-series</a>

SEQ Regional biodiversity corridor	QLD Government	2017	SE QLD	<a href="https://www.data.qld.gov.au/dataset/south-east-queensland-regional-plan-2017-shapingseq-series">https://www.data.qld.gov.au/dataset/south-east-queensland-regional-plan-2017-shapingseq-series</a>
Logan Biodiversity Corridor	Logan City Council	2015	Logan, QLD	<a href="https://arcgis.loganhub.com.au/arcgis/rest/services/LoganHub/Logan_Planning_Scheme_v8_0/MapServer/8">https://arcgis.loganhub.com.au/arcgis/rest/services/LoganHub/Logan_Planning_Scheme_v8_0/MapServer/8</a>
Logan Koala Corridor	Logan City Council	2015	Logan, QLD	<a href="https://arcgis.loganhub.com.au/arcgis/rest/services/LoganHub/Logan_Planning_Scheme_v8_0/MapServer">https://arcgis.loganhub.com.au/arcgis/rest/services/LoganHub/Logan_Planning_Scheme_v8_0/MapServer</a>
SA Land Cover Layers 1987- 2015	South Australian Government	2017	SA	<a href="https://data.sa.gov.au/data/dataset/sa-land-cover">https://data.sa.gov.au/data/dataset/sa-land-cover</a>
SA Bushfires and Prescribed Burns History	South Australian Government	2020*	SA	<a href="https://data.sa.gov.au/data/dataset/fire-history">https://data.sa.gov.au/data/dataset/fire-history</a>
TASVEG - The Digital Vegetation Map of Tasmania (polygons and fire attributes)	Tasmanian Government	2020	Tas	<a href="https://dipwve.tas.gov.au/conservation/development-planning-conservation-assessment/planning-tools/monitoring-and-mapping-tasmanias-vegetation-(tasveg)/tasveg-the-digital-vegetation-map-of-tasmania">https://dipwve.tas.gov.au/conservation/development-planning-conservation-assessment/planning-tools/monitoring-and-mapping-tasmanias-vegetation-(tasveg)/tasveg-the-digital-vegetation-map-of-tasmania</a>
Threatened native vegetation communities Tasmania	Tasmanian Government	2020	Tas	<a href="https://dipwve.tas.gov.au/conservation/threatened-species-and-communities/threatened-native-vegetation-communities">https://dipwve.tas.gov.au/conservation/threatened-species-and-communities/threatened-native-vegetation-communities</a>
Fire History Tasmania	Tasmanian Government	2020	Tas	<a href="https://listdata.thelist.tas.gov.au/opendata/">https://listdata.thelist.tas.gov.au/opendata/</a>
Modelled old-growth forest	Victorian Government	2021	Vic	<a href="https://discover.data.vic.gov.au/dataset/modelled-old-growth-forest">https://discover.data.vic.gov.au/dataset/modelled-old-growth-forest</a>
Logging history overlay of most recent harvesting activities	Victorian Government	2020	Vic	<a href="http://services.land.vic.gov.au/catalogue/metadata?anzlicId=ANZVI0803002521&amp;publicId=guest&amp;extractionProviderId=1#">http://services.land.vic.gov.au/catalogue/metadata?anzlicId=ANZVI0803002521&amp;publicId=guest&amp;extractionProviderId=1#</a>
Forest Types of Victoria	Victorian Government	2021	Vic	<a href="https://discover.data.vic.gov.au/dataset/forest-types-of-victoria">https://discover.data.vic.gov.au/dataset/forest-types-of-victoria</a>
Native Vegetation - Modelled 1750 Ecological Vegetation Classes	Victorian Government	2021	Vic	<a href="https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-1750-ecological-vegetation-classes">https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-1750-ecological-vegetation-classes</a>
Relative Forest Age	Victorian Government	2021	Vic	<a href="https://discover.data.vic.gov.au/dataset/relative-age">https://discover.data.vic.gov.au/dataset/relative-age</a>
Relative Forest Growth Stage Classification	Victorian Government	2014	Vic	<a href="https://discover.data.vic.gov.au/dataset/relative-forest-growth-stage-classification">https://discover.data.vic.gov.au/dataset/relative-forest-growth-stage-classification</a>

DBCA Fire History	Western Australian Government	2019	WA	<a href="https://catalogue.data.wa.gov.au/dataset/dbca-fire-history/resource/dc7a80c9-437d-4c08-accb-0234822e91e6">https://catalogue.data.wa.gov.au/dataset/dbca-fire-history/resource/dc7a80c9-437d-4c08-accb-0234822e91e6</a>
Native Vegetation Extent	Western Australian Government	2020	WA	<a href="https://catalogue.data.wa.gov.au/dataset/native-vegetation-extent">https://catalogue.data.wa.gov.au/dataset/native-vegetation-extent</a>
Pre-European Vegetation	Western Australian Government	2021	WA	<a href="https://catalogue.data.wa.gov.au/dataset/pre-european-dpird-006">https://catalogue.data.wa.gov.au/dataset/pre-european-dpird-006</a>
Roadside Conservation - Capture Status	Western Australian Government	2017	South west WA	<a href="https://catalogue.data.wa.gov.au/dataset/roadside-conservation-committee-rcc-status-map-dpaw-042">https://catalogue.data.wa.gov.au/dataset/roadside-conservation-committee-rcc-status-map-dpaw-042</a>
Forest Disease Risk Areas	Western Australian Government	2019	South west WA	<a href="https://catalogue.data.wa.gov.au/dataset/forest-disease-risk-areas">https://catalogue.data.wa.gov.au/dataset/forest-disease-risk-areas</a>
Vegetation Complexes - Swan Coastal Plain	Western Australian Government	2018	Swan Coastal Plain, WA	<a href="https://catalogue.data.wa.gov.au/dataset/vegetation-complexes-swan-coastal-plain">https://catalogue.data.wa.gov.au/dataset/vegetation-complexes-swan-coastal-plain</a>
Vegetation Complexes - South West forest region of Western Australia	Western Australian Government	2018	South west WA	<a href="https://catalogue.data.wa.gov.au/dataset/vegetation-complexes-swf-50k">https://catalogue.data.wa.gov.au/dataset/vegetation-complexes-swf-50k</a>