

Key variables, indicative indicators and data sources for understanding integrated nature–human systems.

Capital	Generic variables	Relevant to:		Indicative indicator(s)	Data source(s)*
		Marine	Terrestrial		
Natural	Forests		✓	Forests – natural	DAWE
	Significant ecological communities and species	✓	✓	Threatened ecological communities and species, totem species	DAWE
	Underground water		✓	Underground water	GA
	Surface water		✓	Surface water	GA
	Soil		✓	Fractional coverage	GA/CSIRO
	Extreme events	✓	✓	Recent fires, floods, drought, cyclones/tropical storms	NRRA
	Vegetation cover		✓	Vegetation cover	NVIS, GA, CSIRO
	Sea floor, benthic habitats, vegetation cover	✓		Seagrass, kelp etc	NISBHD
	Ocean use zoning classification	✓		Conservation zones, habitat protection zones etc	CAPAD, GBRMPA
	Land use and management classification		✓	Land use and management classification	ABARES
	Climate	✓	✓	Seasonal rainfall, temperatures, windspeeds, humidity	BOM
	High volume shipping traffic	✓		Shipping lands and high-volume shipping areas	AMSA
	Commercial fishing	✓		Catch per unit effort by gear type	AFMA
Human	Population density	✓	✓	Population and land area	ABS Census
	Visiting population	✓	✓	International and domestic visitors	TRA
	Household size	✓	✓	Average household size	ABS Census
	Family composition	✓	✓	One-parent families, families with >3 or 0 children	ABS Census
	Gender	✓	✓	Number of women	ABS Census
	Age	✓	✓	Median age	ABS Census
	Employment	✓	✓	Unemployment rate	ABS Census
	Education	✓	✓	Schooling, degree	ABS Census
	Natural resource management skills	✓	✓	Natural resource management training	<i>Not identified</i>
	Green-economy skills	✓	✓	Green economy training	<i>Not identified</i>
Health	✓	✓	Disability payments, life expectancy	DSS/NDIS, ABS	
Social/Institutional	Land concentration		✓	Land concentration	ABARES
	Land tenure		✓	Land tenure	ABARES
	Number of individual landholders		✓	Number of individual landholders	ABARES
	Average block size		✓	Average block size	ABARES
	Protected lands and waters	✓	✓	Land designated as natural parks, protected areas, heritage or Indigenous heritage, protected areas (land and sea Country)	CAPAD, DAWE, NIAA

Capital	Generic variables	Relevant to:		Indicative indicator(s)	Data source(s)*
		Marine	Terrestrial		
	Native Title	✓	✓	Native Title determination outcomes	NNTT
	Agreements over use of Indigenous-held lands and seas	✓	✓	Indigenous land-use agreements, traditional use of marine resources agreements	NNTT, GBRMPA
	Landcare boundaries		✓	Landcare boundaries	DAWE
	Tenure of forests		✓	Tenure of forests	DAWE
	Policies including environmental considerations	✓	✓	Environmental laws, regulations, standards for industry (in particular, building, manufacturing, agriculture and mining)	Federal/state/territory legislatures, Standards Australia
	Subjective sense of health	✓	✓	Self-reported health	HILDA
	Sense of place	✓	✓	Mobility	ABS Census
	Sense of wellbeing	✓	✓	Self-reported life satisfaction	HILDA
	Corporate responsibility	✓	✓	Companies with sustainability targets	<i>Not identified</i>
	Social: cultural background	✓	✓	Place of birth, English spoken at home, religion, Indigeneity	ABS Census
	Attitudes towards environmental behaviours	✓	✓	Strategies/campaigns promoting pro-environmental behaviours	<i>Not identified</i>
	Environmental behaviour	✓	✓	People recycling, using public transport etc	<i>Not identified</i>
	Environmental technologies	✓	✓	Solar panels, low consumption appliances, home insulation	<i>Not identified</i>
	Environmental activities	✓	✓	Contributions to environmental education, promotion, working on land and sea	<i>Not identified</i>
	Environmental activities	✓	✓	Participation in conservation activities	ABS
	Subjective norms/peer influence	✓	✓	Membership/following environmental organisations/activists; self-reported influence of peers	<i>Not identified</i>
	Perception of ability to act environmentally	✓	✓	Self-reported belief in being able to act/make a change	<i>Not identified</i>
	Trust in governing institutions	✓	✓	Self-reported trust	<i>Not identified</i>
	Social cohesion	✓	✓	Volunteering	ABS Census
	Social networks and communication preferences	✓		To locate, activate, interact with to enable change mechanisms	<i>Not identified</i>
	Policies including Indigenous considerations/traditional management practices	✓	✓		NIAA
	Environmental management and conservation	✓	✓	Funding (federal, state, council)	<i>Not identified</i>
	Environmental management by Indigenous people/groups	✓	✓	Funding (federal, state, council)	<i>Not identified</i>

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		Marine	Terrestrial		
	NRM/conservation plans funded/implemented	✓	✓	Number of plans, area of land covered	<i>Not identified</i>
	Environmental incentive/schemes for landowners	✓	✓	Uptake of funding, area of land covered	<i>Not identified</i>
	Political party	✓	✓	Party incumbent, party preferences	AEC
	Support for community groups and NGOs	✓	✓	Funding for environmental activities by community and NGOs	<i>Not identified</i>
	Support for Indigenous groups and programs	✓	✓	Number of land and sea rangers, funding for activities	NIAA
	Support for culturally appropriate environmental activities	✓	✓	Funding targeting culturally appropriate activities	<i>Not identified</i>
	Land and sea management by NGOs/Indigenous organisations	✓	✓	Area of land and sea managed by NGOs/Indigenous organisations	ILSC
Financial/built	Income	✓	✓	Personal income, household income	ABS Census
	Home ownership	✓	✓	House fully owned or being purchased, medium housing loan	ABS Census
	Rental costs	✓	✓	Median rent	ABS Census
	Economic participation	✓	✓	Employment, unemployment, businesses (including Indigenous)	ABS Census
	Economy	✓	✓	\$\$\$s or employment from sectors of the economy	ABS Census (for employment)
	Environmental incentive schemes for land managers	✓	✓	Participation in environmental incentive schemes	<i>Not identified</i>
	Cost of SME borrowing	✓	✓	Interest from SME borrowing	ABA
	Environmental best practice in lending	✓	✓	Banks/financial institutions following best environmental practice	<i>Not identified</i>
	Green borrowing	✓	✓	Green loans	<i>Not identified</i>
	Credit trading schemes	✓	✓	Number and value of trades: carbon credits, reef credits	Clean Energy Regulator, QLD government
	Environmentally responsible business conduct	✓	✓	Requirements for best-practice/best-available techniques, investment in environmental research and development by business and government	<i>Not identified</i>
	Indigenous land and management businesses	✓	✓	Number and income of businesses	ORIC
Physical/built	Transport	✓	✓	Airports, ports, road network	CSIRO
	Telecommunications	✓	✓	Mobile phone coverage, household access	ABS Census
	Commercial buildings	✓	✓	Businesses	<i>Not identified</i>

Capital	Generic variables	Relevant to:		Indicative indicator(s)	Data source(s)*
		Marine	Terrestrial		
	Fishing/boating infrastructure	✓		Boat ramps, ports	GA
	Marine tourism infrastructure	✓		Pontoons, platforms	<i>Not identified</i>
	Production infrastructure	✓	✓	Factories, power generation, pipelines	<i>Not identified</i>
	Mines		✓	Mine location and status	GA
	Offshore petroleum		✓	Offshore petroleum exploration and leases	NOPIMS
	Social infrastructure	✓	✓	Schools; health, community and sports facilities	<i>Not identified</i>
	Remoteness	✓	✓	Remoteness index	ABS
	Dwellings	✓	✓	Homes	ABS Census
	Home rental	✓	✓	Homes rented commercially or from community organisation	ABS Census
	Access to internet	✓	✓	Homes without internet connection	ABS Census
	Access to motor vehicle	✓	✓	Home without access to motor vehicle	ABS Census
	Overcrowding	✓	✓	Number of persons per bedroom	ABS Census
	Occupied private dwellings	✓	✓	Occupied private dwellings	ABS Census
	Housing and public utilities at risk from biosecurity pests	✓	✓	Housing and public utilities at risk from biosecurity pests	CEBRA

Not identified = data source not identified (i.e. potentially not available, or not available consistently across different regions of Australia).

* For explanation of acronyms, please see the **Error! Reference source not found.**