



ASSET/THREAT	INDICATOR	TYPE	AGENCY / COLLECT-ION
Economic			
SURFACE WATER/ flow reduction	Frequency, duration and extent of water shortages.	State	BW, CHW, SWW
	Demand and supply of public water: demand (water use) as a percentage of the available resource (availability, sustainable yield).	Threat	BW, CHW, SWW
	Percentage of catchments over-allocated or approaching over-allocation.	Threat	BW, CHW, SWW
	Compliance with Bulk Water Entitlements; licenses issued and total volume of water allocated by user sector. Number of licenses surrendered, cancelled, expired, not renewed, and volume of water.	Response	SRW
	Number of Streamflow Management Plans completed.	Response	CCMA
SURFACE WATER/ acidity, nutrients, sediments, turbidity	In-stream pH by river reach.	State	DSE
	Heavy metal concentrations by river reach.	State	EPA DSE
	Pesticide exposure: estimated contamination by pesticides by river reach.	State	EPA DSE
	Total phosphorus and total nitrogen concentrations compared with SEPP (WoV) for the protection of aquatic ecosystems by river reach.	State	EPA DSE
	Algal Bloom frequency by river reach.	State	DSE
	Rate of riverbank erosion in relation to catchment area.	State	CCMA
	Stream turbidity by river reach.	State	DSE EPA
	Volume of stormwater discharged to receiving waters.	Threat	LOCAL GOVT
	Volume of wastewater disposed to inland waters, land, and reused.	Threat	BW, CHW, SWW, LOCAL GOVT
	Concentrations of TSS, BOD, phosphorus from municipal discharges to water bodies (coastal and fresh waters) in ($\mu\text{g}/\text{m}^3$)	Threat	BW, CHW, SWW, LOCAL GOVT
	Participation: number of people or groups involved in community-based monitoring and action relating to inland waters (e.g. Waterwatch, Frogwatch).	Response	CCMA
	Percentage of rivers and wetlands that have developed water quality management plans.	Response	CCMA
	Percentage of waterways which conform to guidelines of the National Water Quality Management Strategy or SEPP (WoV).	Response	CCMA
Number, type and financial penalties for water-related offences.	Response	SRW, EPA, DSE	

TABLE 38. PRELIMINARY INDICATORS FOR ASSESSING ACHIEVEMENT AGAINST PRIORITY TARGETS WITHIN THE CORANGAMITE REGION



TABLE 38. PRELIMINARY INDICATORS FOR ASSESSING ACHIEVEMENT AGAINST PRIORITY TARGETS WITHIN THE CORANGAMITE REGION - continued

ASSET/THREAT	INDICATOR	TYPE	AGENCY / COLLECT-ION
SURFACE WATER/ salinity	Lake, wetlands and stream water levels and salinity concentrations (mg/L TSS).	State	DSE
GROUNDWATER/ overuse	Groundwater extraction (annual withdrawals) versus availability (in m ³).	Threat	CCMA, BW
GROUNDWATER/ quality threats	Groundwater contaminants: by type (e.g. nitrates, salinity, toxicants) and extent.	State	BW, CHW, SWW
	Trend in groundwater levels (rising, constant, falling) and salinity concentrations over time.	Threat	DSE
LAND/ salinity	Trend in extent (area in hectares) and severity (low, moderate, high) of land secondary salinity over time.	State	DPI, CCMA
	Trend in groundwater levels (rising, constant, falling) and salinity levels over time.	State	DPI, CCMA
	Proportion of farmers and area farmed using biophysical water balance information to design and implement farm plans.	Response	DPI, CCMA
	Proportion of salt-affected areas within priority target areas with action plans.	Response	DSE, CCMA
LAND/ weeds	Number of new species included into regional priority list, extent and area controlled.	Threat	DSE
	Pest control: number of programs for, and money spent on, controlling exotic pest species.	Response	DPI
LAND/ pest animals	Trend in area of land under long term rabbit control over time.	Response	DSE
	Determination of lost agronomic productivity due to predation.	Threat	CCMA/ DSE
	Determination of loss non-market benefits (environmental) due to predation.	Threat	CCMA/ DSE
LAND/ soil	Area of land affected by soil acidification.	State	CCMA
	Area of land affected by soil erosion.	State	CCMA
	Area of soil structure decline.	State	DPI
LAND/ threats amenable to forestry options	Area of commercial plantations.	State	DSE
	Area of farms containing agroforestry development, more than 15 ha.	State	DSE
INFRASTRUCTURE/ floods	Number of flood and drought events declared, long term climatic trends.	State	CCMA
	Alienated floodplains: Proportion of river channels changed via engineering techniques (e.g. channelisation, irrigation induced drainage flows) and other 'improvements'.	Threat	CCMA
	Flood risks defined and managed: new developments take flood risk into consideration.	Response	CCMA



ASSET/THREAT	INDICATOR	TYPE	AGENCY / COLLECT-ION
INFRASTRUCTURE/ salinity	Trend in urban area threatened by salinity over time.	Threat	DSE DPI
	Trend in infrastructure assets threatened by salinity over time.	Threat	DSE
Environmental			
COASTS/ including estuaries and marine environments	Biological integrity of estuaries: number of estuaries with healthy/ degraded aquatic communities.	State	DSE, RCBs
	Estuary flow regime: number of estuaries with acceptable/ abnormal flow regimes.	State	DSE, RCBs
	Estuary water quality: number of estuaries where water quality exceeds/ does not exceed trigger levels for algal blooms.	State	DSE, RCBs
	Number of estuaries that are largely un-modified or pristine, and the number that are modified/ degraded.	State	DSE, RCBs
	Marine sediments: condition of marine sediment based on attributes that affect biodiversity such as: organic content; grain size distribution; bound pollutants.	State	DSE
	Development threat: number of estuaries that face/ do not face threats from nearby urban or industrial development.	Threat	DSE, LOCAL GOVT
	Location and number of licensed point-source discharges into estuaries, lagoons, bays, and coastal waters (by type and volume of materials discharged).	Threat	DSE
	Marine sediments: percentage of sites with sediment contamination that might pose a risk to humans and aquatic life.	Threat	DSE
	Exceedance of marine and estuarine water quality guidelines.	Threat	DSE
	Marine pollution incidents: type, volume and frequency of significant marine discharges (including oil spills), contaminant disposal and accidental pollution.	Threat	DSE
	Selected coastal surface water pollutants in shellfish: the concentration levels of selected pollutants in oysters and mussels.	Threat	DSE
	Tonnage of foreign ballast water discharged at major ports.	Threat	DSE
	Number of estuaries managed/ not managed under sustainable management plans.	Response	DSE, RCBs
	Number, type and extent to which, coastal management plans have been establishing and implemented to manage introduced marine pests.	Response	DSE, RCBs

TABLE 38. PRELIMINARY INDICATORS FOR ASSESSING ACHIEVEMENT AGAINST PRIORITY TARGETS WITHIN THE CORANGAMITE REGION - continued



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ASSET/THREAT	INDICATOR	TYPE	AGENCY / COLLECT-ION
SURFACE WATERS/ including rivers, streams, lakes and wetlands.	Index of Stream Condition.	State	CCMA DSE
	Km of river reaches that do NOT need (i) bank reconstruction, (ii) bed stabilisation, in-stream sediment works or instream vegetation works , (iii) streamside revegetation, (iv) streamside revegetation, (iv) removal of instream barriers, (v) willow removal.	State	CCMA
	Percentage of waterways conforming to guidelines of the National Water Quality Management Strategy or SEPP (WoV): environmental uses.	Response	CCMA EPA
	Guideline trigger levels reached: composite indicator of samples exceeding trigger levels in the application of Australian water quality guidelines for the protection of aquatic ecosystems.	Threat	DSE EPA
	Frogwatch records: populations of frogs in surface waters and wetlands within each basin.	State	COMM-UNITY
	Exotic pest flora and fauna: number, distribution and rate of spread of introduced marine and freshwater species (aquatic weeds, fish) declared as pests or weeds per drainage division.	Threat	DSE DPI
	Participation: number of people or groups involved in community-based monitoring and action relating to inland waters (e.g. Waterwatch, Frogwatch).	Response	CCMA
	Percentage of area of catchments covered by water resource management plans detailing environmental flows.	Response	CCMA, SRW, CHW, SWW, BW
	Number of wetlands with water level management.	Response	CCMA
	Native vegetation Area of EVC's as a proportion of pre-European areas.	State	DSE
	Area of remnant vegetation threatened by salinity.	Threat	DSE
	Fauna Percentage of native habitat colonised by invasive species (location, estimated area of infestation, estimated rate of spread, number of incursion locations) - e.g. State prohibited weeds	State	DSE
	Number and type of regional/ catchment management plans, which include actions to reduce the threat to biodiversity from naturalised non-native species.	Response	DSE
	The amount of funding spent on research and control of exotic (or alien) and genetically modified organisms compared with the amount estimated to be required.	Response	DSE DPI

ASSET/THREAT	INDICATOR	TYPE	AGENCY / COLLECT-ION
	Number, distribution and rate of spread of introduced (non-indigenous) mammals, birds, invertebrates and pathogens, identified as pests that pose major threats to biological diversity. This indicator may also include displaced or trans-located native species.	Threat	DSE DPI
	Number of threatened taxa and communities at risk from land clearing.	Threat	DSE
Social			
	Heritage Number of sites with accepted management plans	Response	PV, LOCAL GOVT
	Recreation Number of recreational/ tourist visits to key recreational venues.	Threat	PV, LOCAL GOVT
	Number of sites with sustainable management plans.	Response	PV, LOCAL GOVT
	Community Number of urban people participating in community groups.	Response	CCMA
	Number of rural people participating in community groups.	Response	CCMA



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