

Threat Category

Typologies considered in development

- IUCN Threat Classification Scheme (also used in work by Michelle Ward, Stephen Kearney, April Hedd, Ayesha Tulloch)
<https://www.iucnredlist.org/resources/threat-classification-scheme>
- National Climate Risk Assessment (Australia) hazards (adapted by Tia Brullo for CS Hub project 2.1)

Title	Description
Agriculture & Aquaculture	Threats from farming and ranching as a result of agricultural expansion, intensification or practices; includes silviculture, mariculture and aquaculture.
Biological Resource Use	Threats from consumptive use of "wild" biological resources including deliberate and unintentional harvesting effects; also persecution or control of specific species.
Climate Change	Change in climate patterns (eg those resulting from increased atmospheric greenhouse gases like CO ₂) and/or events outside the natural range of variation that could wipe out a vulnerable species or ecosystem. Holistic approach to abating climate change compared to a specific variable or event e.g. heat, flood, bushfire listed below.
Energy Production & Mining	Threats from production of non-biological resources.
Geological Events	Threats from catastrophic geological events
Human Intrusions & Disturbance	Threats from human activities that alter, destroy and disturb habitats and species associated with non-consumptive uses of biological resources.
Invasive & Problematic Species, Pathogens & Genes	Threats from non-native and native plants, animals, pathogens/microbes, or genetic materials that have or are predicted to have harmful effects on biodiversity following their introduction, spread and/or increase in abundance or virulence.
Natural System Modifications	Threats from actions that convert or degrade habitat in service of "managing" natural or semi-natural systems, often to improve human welfare.
Pollution	Threats from introduction of exotic and/or excess materials or energy from point and nonpoint sources.
Residential & Commercial Development	Human settlements or other non-agricultural land uses with a substantial footprint.
Transportation & Service Corridors	Threats from long, narrow transport corridors and the vehicles that use them including associated wildlife mortality.
Many	Multiple threats listed, not clear what intervention was targeting.
Bushfire	Bushfires, grassfires, scrub fires, smoke.
Riverine Flooding	Riverine flooding, estuarine flooding.

Extreme events broadly	Stochastic or extreme weather or climate events, not specified.
Drought, reduced rainfall	Variations in rainfall, increases or decreases, over any time scale, including changes in rainfall patterns. Short term or long-term drought due to increased aridity, decreased rainfall and increased heat.
Coastal erosion, flooding and change	Coastal erosion and flooding due to sea level rise or storms and storm surges or tidal anomalies. Sea level rise, storm surge, king tides.
Temperature extremes, Changes in temperature, Heatwaves	Short term periods of extreme heat or extreme cold. Terrestrial heatwaves including for riparian or freshwater systems.
Humidity	Short term, long term or seasonal changes in humidity levels.
Extreme Wind	Windstorms across temperate, subtropical and tropical regions, cyclones.
Ocean warming and acidification	Marine heatwaves, coral bleaching, changes in ecological cycles, acidification, changes in ocean currents and temperatures. Average temperature increases or decreases and variability.