

Conservation of Freshwater Ecosystem Values (CFEV) Glossary

Term	Abbrev.	Explanation (CFEV context)	Example
Class or biophysical class		An individual classification group for each <i>ecosystem component</i> (geomorphic, hydrological, biological) that are used to characterise each of the <i>ecosystem spatial units</i> . Each <i>ecosystem spatial unit</i> (a river section, for example) is characterised by the set of individual <i>biophysical classes</i> from each of the <i>ecosystem components</i> .	For rivers, G1 to G44. (all codes have descriptions) are different fluvial geomorphic river types, H1 to H4. are different hydrological regions, BC1 to BR7M are different macroinvertebrate assemblages, F0 to F56 are different fish assemblages, M1 to M6 are different macrophyte assemblages, C0 to C6 are different crayfish regions and T1 to T50 are different tree assemblages. For rivers, a single river section may be characterised using the biophysical classes as: G37; H3; BC9f; F0; M1; C6; T27.
Condition score		A score or rank signifying the degree of change from natural pre-European settlement condition (<i>Naturalness</i> or N-score) with respect to a specific <i>condition variable</i> .	In most cases, condition scores range between 0 and 1, and may be discrete (one of a number of pre-determined values) or continuous (any value between 0 and 1), where 0 = disturbed and 1 = near pristine. See Sections 5 – 11 for exceptions.
Condition variable		Variables used as indicators of ecosystem condition. These variables are integrated to determine the overall <i>Condition score</i> for each <i>ecosystem spatial unit</i> .	For rivers, condition variables include native fish condition, flow change, catchment disturbance, sediment input, etc.
Conservation Management Priority	CMP	A summary estimate of the priority for conservation management, which integrates an assessment of conservation value (either <i>Representative Conservation Value</i> or <i>Integrated Conservation Value</i>), <i>Naturalness</i> and <i>Land Tenure Security</i> .	VH = Very High CMP, H = High CMP, M = Moderate CMP, L = Lower CMP
Conservation Management Priority – Immediate	CMPI	Estimate of the relative priority for immediate conservation management to ensure the protection of significant freshwater values. CMPI is developed from a set of expert rules combining conservation value (either <i>Representative Conservation Value</i> or <i>Integrated Conservation Value</i>), <i>Land Tenure Security</i> and <i>Naturalness scores</i> . CMPI addresses current risk.	VH = Very High CMP, H = High CMP, M = Moderate CMP, L = Lower CMP A unit with High <i>Representative Conservation Value</i> , High <i>Naturalness</i> and Low <i>Land Tenure Security</i> requires immediate attention to its conservation management (Very High CMPI), but if the <i>Land Tenure Security</i> is High, then CMPI is Low.

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Conservation Management Priority – Potential	CMPP	Estimate of the relative priority for conservation management when a development is proposed (within the catchment of an <i>ecosystem spatial unit</i>) that may contribute to a change in aquatic ecological condition or status. CMPP is developed from a set of expert rules combining Conservation Value (either <i>Representative Conservation Value</i> or <i>Integrated Conservation Value</i>), <i>Land Tenure Security</i> and <i>Naturalness scores</i> . CMPP addresses possibilities of future risk.	VH = Very High CMP, H = High CMP, M = Moderate CMP, L = Lower CMP A unit with High <i>Representative Conservation Value</i> , High <i>Naturalness</i> and High <i>Land Tenure Security</i> will have a High CMPP. That is, there is a need for conservation management if a development (or change of management) is being proposed in the catchment.
Distinctiveness		CFEV assessment criterion: the type, range and significance of <i>Special Values</i> associated with each <i>ecosystem spatial unit</i> .	
Ecosystem component		Physical or biological components of freshwater-dependent ecosystems, used to characterise each of the <i>ecosystem themes</i> .	For rivers: physical components include fluvial geomorphology and hydrology, and biological components include macroinvertebrates, native fish, vegetation context (tree assemblages), macrophytes and crayfish.
Ecosystem theme		One of the seven freshwater-dependent ecosystems evaluated using the CFEV assessment framework.	Rivers, Waterbodies, Wetlands, Estuaries, Saltmarshes, Karst, Groundwater Dependent Ecosystems (GDEs)
Expert rule system		A method based on expert knowledge for integrating a number of variables into one overall score or rating.	For rivers, the condition variables of mining sedimentation and catchment disturbance were combined using an expert rule system to produce an overall score for sediment input. See Appendices 3 and 4 for details.
Important biophysical class		The <i>biophysical class</i> that is the main driver for the selection and conservation value ranking of an <i>ecosystem spatial unit</i> . This is the value of which the <i>ecosystem spatial unit</i> is considered to be most representative.	For rivers, one of the <i>biophysical classes</i> from the seven <i>ecosystem components</i> (e.g. a single fluvial geomorphic river type (G1 or G2 or G3, etc.) or a single fish assemblage class (F0 or F1 or F2, etc.))
Integrated Conservation Value	ICV	The conservation value of an <i>ecosystem spatial unit</i> expressed as the relative importance of that unit where <i>Representative Conservation Value</i> has been combined with its <i>Special Value</i> rating.	VH = Very High ICV, H = High ICV, M = Moderate ICV, L = Lower ICV

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Land Tenure Security	LTS	A rating of the degree to which land tenure may have the potential for protecting freshwater-dependent ecosystem values.	H = High, M = Medium, L = Low
Naturalness		CFEV assessment criterion: the degree to which each <i>ecosystem spatial unit</i> differs from its natural condition (pre-European settlement reference). This term is often interchanged with condition.	
Naturalness score	(N-score)	The final <i>condition score</i> used to assess the <i>Naturalness</i> of an individual <i>ecosystem spatial unit</i> . The N-score is derived by integrating the <i>condition scores</i> of each of the <i>condition variables</i> .	N-score ranges between 0 (disturbed) and 1 (near pristine); a banding process also generated Naturalness categories of High, Medium and Low.
Representative Conservation Value	RCV	The conservation value of an <i>ecosystem spatial unit</i> expressed as the relative importance of a <i>biophysical class</i> (the <i>important biophysical class</i>), with a priority on <i>spatial units</i> of high <i>Naturalness</i> .	A = first group of <i>spatial units</i> selected by the <i>spatial selection algorithm</i> (highly representative of its <i>important biophysical class</i>), B = second group of <i>spatial units</i> selected, C = remaining spatial units (least representative of its <i>important biophysical class</i>).
Representativeness		CFEV assessment criterion: the degree to which the <i>ecosystem spatial unit</i> is typical or characteristic of the <i>biophysical class</i> or group to which it has been assigned.	
Spatial selection algorithm		The mathematical method used for selecting and prioritising <i>spatial units</i> . The algorithm iteratively selects <i>spatial units</i> in each <i>ecosystem theme</i> based on their relative conservation value, determined using outputs from the classification (<i>biophysical classes</i>) and condition assessment (<i>N-scores</i>).	See Appendix 5 of the CFEV technical report for details.
Spatial unit or ecosystem spatial unit		The smallest mapped Geographic Information System (GIS) feature by which <i>ecosystem themes</i> are divided and assessed. These are the assessment units to which all CFEV data were assigned.	Points – GDEs Lines – River sections Polygons – Waterbodies, Wetlands, Estuaries, Saltmarshes, Karst

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Special Values	SV	Unique or distinctive conservation values (e.g. individual species, communities, sites) other than those identified in the conservation value assessment.	<i>Galaxias fontanus</i> (Swan galaxias), <i>Acacia axillaris</i> (Midlands wattle), Mole Creek karst system
Special Values rating		Summary expression of the level of significance of all <i>Special Values</i> .	Outstanding, undifferentiated or non-outstanding.
Special Values type		A group of <i>Special Values</i> considered to be similar because of shared taxonomy or similar legislative considerations.	Threatened flora and fauna species, priority geomorphic and limnological features, important bird sites.