Table 1 : Requirements for ECA members seeking Services Accreditation

*Note: For each service category, it is expected that qualifications as a professional environmental practitioner are demonstrated **OR** in lieu of qualifications, equivalent experience is to be provided.*

Service Category	Definition	Expected Qualifications / Equivalent Experience and Competencies to be Demonstrated
TRAINING AND DEVELOPMENT		

Training provider	Preparation and delivery of training courses aimed at developing skills of practitioners in one or more environmental service categories.	• Demonstrated provision of training in a consulting role on environmental services within the approvals and planning, land management, pollution, ecological service or physical service categories.
		• Typical experience can include:
		  • Experience as a Lecturer at a recognised tertiary institute or equivalent in relevant training fields; or
		  • Demonstrated facilitation of recognised training courses in relevant fields.

APPROVALS AND PLANNING		

Project management	Managing client/consultants to deliver project approvals or other environmental projects involving multiple stakeholders and disciplines	• Typical experience expected to include:
		  • Demonstrated accountability for the planning, scheduling, procurement and execution of a project of significant size; and
		  • Demonstrated experience in the coordination of multidisciplinary inputs (usually >4) to deliver environmental projects.
		• Project management should be the applicant's primary role and not part of a role in delivering a project.
		• It is expected that the applicant will have a mid-to-senior level position in the organisation to be able to be responsible for budgets and directing personnel/subcontractors.

Environmental Impact Assessment and Approvals	Preparation of documentation for obtaining environmental approvals through the Commonwealth EPBC Act, Part IV or Part V of the State EP Act or via legislation administered by other DMAs	• Training in relevant EIA practice, by a recognised tertiary institute or equivalent.
		• Typical experience expected to include:
		  • Demonstrated track record in multidisciplinary EIA authorship, review and coordination; and
		  • Facilitation and/or advice on EIA approvals requirements, including scoping of robust studies that align with agency expectations; and
		  • Usually applicant will have a lead coordination/review role for the entire EIA.

Land Use Planning	Environmental considerations in land development and resource use planning	• Training in relevant planning practice, by a recognised tertiary institute or equivalent. • Typical experience at a specialist level is expected to include: • Demonstrated track record in local / regional planning advice and delivery, supported by appropriate reports.
Environmental Management Plans (EMP)	Preparation and/or implementation of Management Plans	• The applicant to have personally developed/coordinated/been responsible for the details of the EMP. • The EMPs used as examples should have been approved and implemented. • Ideally, applicant involved in the implementation of the EMP after its preparation.
Compliance Reporting	Development and presentation of submissions for approvals	• Training in relevant environmental compliance and investigation programs, as available • Typical experience expected to include: • Experience in preparation of and consulting advisory role in the development, maintenance and reporting of an environmental compliance program.
Audits	Auditing environmental performance	• Training in relevant auditing practice, by a recognised tertiary institute or equivalent project management course(s). Ideally will have environmental auditing qualifications by a recognised ISO14001 training provider. • Typical experience expected to include: • Review of environmental performance to ensure compliance with legislation and standards.
Mine Closure Planning	Preparation of mine closure plans	• Qualification in suitable discipline and/or post graduate service qualifications in some aspect of mine closure (e.g. rehabilitation etc). • The applicant is expected to have demonstrated experience in all aspects of plan preparation.

Service Category	Definition	Expected Qualifications / Equivalent Experience and Competencies to be Demonstrated

Offsets	Development of registered offset package	• Typical experience expected to include:
		  • Demonstrated personal involvement and decision-making in the scoping and delivery of an offsets package required for approvals, in alignment with contemporary Government policy and guidance; and
		  • Experience should include offsets not associated with the project (i.e. rehabilitation relating to the actual project is not an offset).

LAND MANAGEMENT		
Catchment Management	Assess/manage human impacts on catchments and receiving water bodies	• Training appropriate to catchment management practice by a recognised tertiary institute or equivalent. • Typical experience expected to include: • Demonstrated track record in local / regional catchment management advisory service.
Environmental Management Systems	Developing environmental management systems	• EMS practitioner qualifications by a recognised ISO14001 training provider. • Personally developed/coordinated/responsible for the details of the EMS.
Rehabilitation	Developing and/or implementing restoration, rehabilitation or revegetation programs	• Qualification appropriate to some aspect of rehabilitation. • Typical experience expected to include: • Demonstrated involvement in all aspects of rehabilitation – including plan preparation, rehabilitation activity, monitoring and reporting.
POLLUTION		

Contaminated sites	Investigating, quantifying, and monitoring and/or remediating of contaminated sites	• Training by a recognised tertiary institute or equivalent. This may include engineering or hydrogeology / soils science with emphasis on contamination risks and management.
		• Typical experience expected to include:
		  • Demonstrated track record in developing preliminary and detailed environmental site investigations in addition to remedial action plans, validation reports and/or hazardous building material assessments; and
		  • Demonstrated experience in applying WA Contaminated sites/NEPM Guidelines.

Waste - Liquid Management	Management, monitoring and planning of industrial and domestic liquid waste and/or supplying WWTP/Tailing ponds	• Training by a recognised tertiary institute or equivalent. This may include civil or process engineering, environmental engineering or environmental chemistry. • Typical experience expected to include: • Demonstrated track record in consultancy services to industrial / domestic / Government water utility clients.
Waste - Solid Management	Monitoring, planning, designing and/or management of industrial and domestic solid waste.	• Training by a recognised tertiary institute or equivalent. This may include civil or process engineering, environmental engineering or environmental chemistry. • Typical experience expected to include: • Demonstrated track record in consultancy services to industrial / domestic / Government water utility clients.

Air quality	Managing, modelling, and/or monitoring and reporting air emissions	• Training in relevant air quality science, by a recognised tertiary institute or equivalent. This may include air quality, environmental chemistry or meteorology.
		• Typical experience expected to include one or more of:
		  • Air quality management – preparation and implementation of air quality management plans to achieve environmental outcomes; and/or
		  • Air quality inventories – development of emissions inventories using recognised guidelines and emission factors to characterise pollutant sources; and/or
		  • Quantitative modelling – preparation, review and running recognised modelling platforms to inform impact assessments of development proposals, aligned with contemporary industry practice; and/or
		  • Air quality monitoring – scoping, definition and implementation of air quality monitoring programs across a development lifecycle (baseline, commissioning, operations) as relevant.

Noise	Managing, modelling, monitoring and reporting noise emissions	• Training in relevant acoustic science, by a recognised tertiary institute or equivalent.
		• Typical experience expected to include one or more of:
		  • Noise and/or vibration management – preparation and implementation of noise / vibration management plans to achieve environmental outcomes; and/or
		  • Noise source inventories – development of inventories using recognised guidelines and emission factors to characterise noise sources; and/or
		  • Quantitative modelling – preparation, review and running recognised modelling platforms to inform impact assessments of development proposals, aligned with contemporary industry practice and recognised noise impact thresholds; and/or
		  • Noise quality monitoring – scoping, definition and implementation of noise monitoring programs across a development lifecycle (baseline, commissioning, operations) as relevant.

Radiation	Radiological monitoring. Developing materials management processes	• Training by a recognised tertiary institute or equivalent. • Typical experience expected to include: • Demonstrated track record in scoping, preparation and delivery of radiation studies as relevant to the consulting profession.
ECOLOGICAL SERVICES		

Aquatic/Wetlands	Ecological advice and biological surveys for terrestrial water ways and wetlands. Groundwater dependent vegetation	• Training in appropriate discipline by a recognised tertiary institute or equivalent.
		• Typical experience expected to include:
		  • Ecological advice on wetlands; and
		  • Surveys of wetland/associated biota (riparian and aquatic flora, aquatic invertebrates, fish, waterbirds); and
		  • Integration of contributing discipline inputs (e.g. hydrogeology, hydrology, soils and biological attributes) to identify wetland values and important communities; and
		  • Wetland species, community or site management plans.

Marine Ecology (Fauna and Flora)	Ecological advice and biological surveys for marine systems	• Training in appropriate discipline by a recognised tertiary institute or equivalent.
		• Typical experience expected to include:
		  • Ecological advice on marine systems; and
		  • Marine ecology surveys (e.g. benthic infauna, shallow and deepwater ecology, marine invertebrates, fish, seabirds, megafauna); and
		  • Integration of contributing discipline inputs (e.g. oceanography, sedimentology); and
		  • Introduced marine pests; and
		  • Marine ecology management plans.

Terrestrial Invertebrate Fauna	Ecological advice and biological surveys for terrestrial invertebrates	• Training in appropriate discipline by a recognised tertiary institute or equivalent.
		• Typical experience expected to include:
		  • Ecological advice on invertebrates, especially SREs; and
		  • Surveys of invertebrates, especially SREs; and
		  • Integration of contributing discipline inputs (e.g. flora and vegetation studies, soils, topography) to identify important invertebrate habitat and communities; and
		  • Invertebrate species and community/habitat management plans.

Terrestrial Vertebrate Fauna	Ecological advice and biological surveys for terrestrial vertebrates	• Training in appropriate discipline by a recognised tertiary institute or equivalent.
		• Typical experience expected to include:
		  • Ecological advice on vertebrates; and
		  • Integration of contributing discipline inputs (e.g. flora and vegetation studies and ecological habitat values) to inform assessment and management of terrestrial fauna ecosystems relevant to consulting projects; and
		  • Assessment of potential risks and impacts from development activities on terrestrial vertebrate fauna, including conservation significant or range-restricted species; and
		  • Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key terrestrial ecological values; and
		  • Terrestrial ecology management – preparation and implementation of terrestrial ecology management plans to achieve environmental outcomes.

Climate Change	Identification of climate change risks to assets and areas as well as adaptation planning to respond to these risks	• Demonstrated proficiency in climate change and greenhouse gas management practice.
		• Training by a recognised tertiary institute or equivalent. This may include environmental science, economics, global sustainability or similar as relevant to the field.
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in providing advisory services for climate change risks and impacts relevant to consulting projects; and
		  • Experience expected to include lifecycle greenhouse emissions inventory development and analysis, advisory services on current and emerging policy and legislative settings at a local, National and international framework; and
		  • Climate change risk assessment as relevant to development proposals, and definition / benchmarking of best practice measures (including offsets, where applicable) to achieve environmental outcomes; and
		  • Demonstrated experience in climate change adaptation planning in a local / regional / global development context.

Conservation	Providing advice relevant to the protection of natural environments and developing and/or implementing conservation programs	• Demonstrated proficiency in conservation advisory services.
		• Training in relevant conservation management practice, by a recognised tertiary institute or equivalent (e.g. conservation biology, ecology, environmental science, Natural Resource Management).
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in local / regional conservation management advisory services; and
		  • Preferably work undertaken in a declared conservation area or next to a conservations area or high value natural bush areas, including advice / coordination / implementation of:
		  • Activities that would enhance the value of the conservation reserve or natural vegetated area e.g. feral animal/weed control, or translocated native flora/ fauna;
		  • Design and implementation of conservation activities that are adjacent to conservation areas/ high value ecosystems.
		  • Integration of contributing discipline inputs (e.g. hydrogeology, hydrology, soils and landforms, and ecological habitat values) to inform assessment and management of conservation areas relevant to consulting projects; and
		  • Demonstrated leading practice in sustainable conservation management and ecosystem services planning, including NRM capacity-building.

Subterranean Fauna	Providing ecological advice on Australian subterranean fauna. Conducting subterranean fauna surveys	• Demonstrated proficiency in subterranean fauna ecological services.
		• Training in relevant subterranean management practice, by a recognised tertiary institute or equivalent (e.g. Qualification in Zoology or Environmental Science or other qualifications with a major in subterranean fauna)
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in subterranean fauna management advisory services, including scoping / preparation and execution of surveys consistent with contemporary industry practice; and
		  • Integration of contributing discipline inputs (e.g. hydrogeology, hydrology, aquatic / wetland studies, and ecological habitat values including GDEs) to inform assessment and management of subterranean ecosystems relevant to consulting projects.

Sustainability	Advisory services across a range of areas from sustainability strategies through to the implementation of sustainability initiatives for business and projects	• Demonstrated proficiency in sustainability management and advisory solutions.
		• Training by a recognised tertiary institute or equivalent. This may include environmental science, economics, global sustainability or similar as relevant to the field.
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in providing advisory services for sustainability strategies relevant to consulting projects; and
		  • Experience expected to include development and analysis of sustainable solutions and initiatives, including leading technology, to be integrated at a project and/or business level; and
		  • Advisory services on current and emerging sustainability policy settings at a local, National and international framework; and
		  • Sustainability benchmarking and reporting consistent with contemporary industry practice; and
		  • Strategic business case development and engagement with business, community and Government stakeholders.

Terrestrial Flora/Vegetation	Providing ecological advice on Australian native flora and vegetation. Conducting flora and vegetation surveys	• Demonstrated proficiency in terrestrial flora / vegetation ecological services.
		• Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. Qualification in Botany, Environmental Science or other qualifications with a major in terrestrial botany).
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in terrestrial flora / vegetation management advisory services, including scoping / preparation and execution of surveys consistent with contemporary industry practice and guidelines; and
		  • Integration of contributing discipline inputs (e.g. terrestrial fauna studies and assessment of ecological habitat values) to inform assessment and management of terrestrial flora species and ecosystems relevant to consulting projects; and
		  • Assessment of potential risks and impacts from development activities on terrestrial flora / vegetation, including conservation significant or range-restricted species; and
		  • Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key terrestrial ecological values; and
		  • Terrestrial ecology management – preparation and implementation of terrestrial ecology management plans to achieve environmental outcomes.

PHYSICAL SERVICES		

Land capability, Soils	Providing advice on:
	
	• managing soil constraints
	• minimising land degradation
	• soil productivity, and
	• management strategies.
	
	Provision of land condition assessments and monitoring. Assessing the inherent physical capacity of land to sustain a proposed form of land use and management such as agriculture, plantation forestry or land based aquaculture without significant risk of degradation to land, soil and water resources.
		• Demonstrated proficiency in land capability and soil services.
		• Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. agriculture, forestry, soil science).
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in local / regional land capability management advisory services; and
		  • Integration of contributing discipline inputs (e.g. land use planning, soils and landforms, ecological habitat and agricultural values, flooding / drainage studies) to inform assessment and management of land capability / soils relevant to consulting projects
		  • Demonstrated leading practice in sustainable landscape management and planning.

Hydrogeology	Hydrogeological modelling and analysis of ground water data, and/or groundwater sampling and reporting, and/or providing advice on the use and management of ground water resources	• Demonstrated proficiency in hydrogeology practice
		• Training in relevant hydrogeological science, by a recognised tertiary institute or equivalent. This may include geology, hydrogeology or spatial sciences.
		• It is understood that practitioners may be specialists in different aspects of hydrogeology, e.g. quantitative modelling competencies are distinctly different to field investigation competencies. This will be taken into account.
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in one or more aspects of hydrogeology science, including:
		  • Scoping, execution and reporting of baseline studies (e.g. bore installation, sampling and analysis); and/or
		  • Interpretation of technical data and information from maps and historical documents to build a conceptual model of groundwater flow and quality; and/or
		  • Using modelling techniques to enable predictions to be made about future trends and impacts on groundwater flow and quality; and/or
		  • Assessment of potential risks and impacts from development activities on groundwater resources and uses, to provide reliable characterisation to inform decision-making; and/or
		  • Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key hydrogeological values; and/or
		  • Groundwater management – preparation and implementation of groundwater management and monitoring plans to achieve environmental outcomes; and/or
		  • It is expected that groundwater modelling specialists are proficient in computer systems and data management / GIS.

Hydrology	Hydrological modelling and analysis of surface water monitoring, and/or flood mitigation and/or providing on management of surface water resources	• Demonstrated proficiency in hydrology practice.
		• Training in relevant hydrological science, by a recognised tertiary institute or equivalent. This may include hydrology, civil engineering or spatial sciences.
		• It is understood that practitioners may be specialists in different aspects of hydrology, e.g. quantitative modelling competencies are distinctly different to field investigation competencies. This will be taken into account.
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in one or more aspects of hydrology science, including:
		  • Scoping, execution and reporting of baseline studies (e.g. surface flow measurement / sampling and analysis); and/or
		  • Interpretation of technical data and information from maps and historical documents to build a conceptual model of surface water flow and quality, and groundwater interactions; and/or
		  • Using modelling techniques to enable predictions to be made about future trends and impacts on surface water flow and quality, including flooding studies; and/or
		  • Assessment of potential risks and impacts from development activities on surface water resources and uses, to provide reliable characterisation to inform decision-making; and/or
		  • Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key hydrological values; and/or
		  • Surface water management – preparation and implementation of surface water management and monitoring plans to achieve environmental outcomes; and/or
		  • It is expected that surface water modelling specialists are proficient in computer systems and data management / GIS.

Marine and Coastal	Providing advice on coastal, estuarine) and /or marine physical and chemical environment and/or Design and implementation of survey and monitoring programs on anthropogenic effects (e.g. water pollution, dredging, coastal erosion etc) on marine ecology	• Demonstrated proficiency in physical marine and coastal practice.
		• Training in relevant marine science, by a recognised tertiary institute or equivalent. This may include oceanography, marine science, coastal geomorphology).
		• It is understood that practitioners may be specialists in different aspects of marine and coastal science. This will be taken into account.
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated track record in one or more aspects of marine and coastal science, including:
		  • Scoping, execution and reporting of physical / physico-chemical marine studies (e.g. water quality, sediment quality, sedimentation and deposition, underwater current profiling); and/or
		  • Assessment of potential risks and impacts from development activities on marine and coastal physico-chemical or ecological values. This could include quantitative methods for assessing physical processes or changes at a local or regional scale); and/or
		  • Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key marine and coastal values.
		  • Marine and coastal management – preparation and implementation of marine management plans to achieve environmental outcomes.

SUPPORT SERVICES		

Data Management and Analysis	Compiling and managing large environmental datasets. Services may include development of relational databases. Providing qualitative, statistical analysis or modelling of environmental data.	• Demonstrated proficiency in provision of advisory consulting services for data management and analysis.
		• Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. computer science, spatial / GIS, mathematics).
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated involvement in the compilation and management of environmental data sets; and
		  • Supporting clients in the qualitative, statistical analysis or modelling of environmental data sets; and
		  • It is expected that specialists are proficient in computer systems and data management / GIS and data portals to facilitate transfer and integration of data solutions; and
		  • Provision of data to other relevant specialists in support of cross-discipline studies (e.g. air, noise, groundwater or surface water modelers dependent on quality data).

Remote Sensing/GIS analysis	Use of satellite mapping, aerial photography and geographic information systems to collect, analyses and present multi layered and multi themed data for planning and decision making affecting the environment	• Demonstrated proficiency in provision of advisory consulting services for remote sensing / GIS analysis.
		• Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. computer science, spatial / GIS, mathematics).
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated involvement in the compilation of satellite mapping, aerial photography and GIS systems to inform remote sensing studies; and
		  • Supporting clients in the assessment of data to inform decision making; and
		  • It is expected that specialists are proficient in computer systems and data management / GIS and data portals to facilitate remote sensing / GIS solutions; and
		  • Provision of data to other relevant specialists in support of cross-discipline studies (e.g. groundwater or surface water modelers, landform / terrain analysis dependent on quality data).

Stakeholder consultation	Communicating with a variety of stakeholders groups regarding developments, policies or activities relevant to environmental assessment and management.	• Demonstrated proficiency in provision of advisory consulting services in support of effective stakeholder engagement.
		• Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. communications, business, public relations).
		• Typical experience at a specialist level is expected to include:
		  • Demonstrated experience in the scoping, preparation and execution of stakeholder engagement activities; and
		  • Stakeholder mapping and analysis, to inform sound decision-making on engagement approach and prioritization; and
		  • Supporting clients in the facilitation of engagement activities, including preparation and follow-up, across Government, industry and community stakeholder groups; and
		  • Supporting clients and/or environmental consultants in the compilation and analysis of consultation outcomes, to integrate into approvals documentation and inform feedback into project design; and
		  • Development, implementation and review of stakeholder engagement programs consistent with contemporary industry practice and guidance.