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| The professional association for environmental consultants in Western Australia |
| **The Environmental Consultants Association (WA) Inc.** |
| Application FORM for ECA Service as a SpecialistOne Specialist Service per ApplicationPlease note that an annual fee of $20 per specialist service line selected applies. |

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| Name: |  |
| Date of Application: |  |
| Signature: |  |

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| **Compliance Reporting** |[ ]  **Air Quality** |[ ]  **Sustainability** |[ ]
| **Environmental Impact Assessment and Approvals** |[ ]  **Contaminated Sites** |[ ]  **Terrestrial Flora / Vegetation** |[ ]
| **Environmental Management Plans** |[ ]  **Noise** |[ ]  **Terrestrial Invertebrate Fauna** |[ ]
| **Land Use Planning** |[ ]  **Radiation** |[ ]  **Terrestrial Vertebrate Fauna** |[ ]
| **Mine Closure Planning** |[ ]  **Waste – Liquid Management** |[ ]  **Land Capability, Soils** |[ ]
| **Offsets** |[ ]  **Waste – Solid Management** |[ ]  **Hydrogeology** |[ ]
| **Project Management** |[ ]  **Aquatic / Wetlands** |[ ]  **Hydrology** |[ ]
| **Environmental Audits** |[ ]  **Climate Change** |[ ]  **Marine and Coastal** |[ ]
| **Catchment management** |[ ]  **Conservation** |[ ]  **Data Management and Analysis** |[ ]
| **Environmental Management Systems (EMS)** |[ ]  **Marine Ecology (Fauna and Flora)** |[ ]  **Remote Sensing / GIS analysis** |[ ]
| **Rehabilitation**  |[ ]  **Subterranean Fauna** |[ ]  **Stakeholder consultation** |[ ]

Please select the Specialist Services you wish to apply for:

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| Application Details RequiredSummary of ECA Specialist skills * Must meet the criteria detailed in Table 1 for the discipline for which you are seeking specialist registration
* Have at least five years’ experience in that discipline
* Can demonstrate at least four projects in which services related to the discipline were performed as a major part of the four projects. A project may only be used as support for specialist service nomination where the discipline area constitutes >40% of the project.
* Have access to the required equipment to collect data for the service (traps for fauna surveys etc), as applicable to the discipline
* If required qualifications are not available then references from at least two industry recognised specialists in the field, confirming the service by the individual is to a satisfactory level.
* If the particular discipline has associated scientific literature and the practitioner has published papers or contributed to development of the discipline in other ways, this will enhance the application to be recognised as a specialist.
* The discipline nominated must comprise a major component of the practitioner’s main consulting role.
* ECA considers it unlikely that any one consultant can legitimately make claim to more than four specialist services, however will consider each application on its merit.

The following should be noted when filling out this form:1. The ECA expects that the onus is on the applicant to adequately demonstrate specialist-level competency. *The application should ensure all the particulars required below and in the following page be provided and numbered so the application can be correctly assessed*
2. Details required for the particular specialist service being sought are on the next page and evidence of experience should support these items
3. Project(s) are to be fully named and the role the particular service being sought by the applicant in the project detailed in terms of:
	1. % of the project the service constituted.
	2. The role the applicant had in carrying out that service as it relates to the specific expected qualifications and experience detailed for the particular specialist disciplines in Table 1.
	3. The name and contact of the client for whom the work was carried out for. If this is confidential, this should be noted accordingly.
	4. Description of the deliverable(s) provided as an outcome of the project.
4. Document the formal qualifications obtained in the service as well as any discipline-specific training, professional conferences, workshops, etc undertaken or attended. Particulars of professional training to be provided (≥1 day) including topic, date, duration and training provider.
5. If no formal qualifications are available or not obtained, references from two other specialists in the service need to be obtained testifying to the applicant’s competence in that service/discipline
6. Present details of representative public reports, peer reviewed journal articles, conference papers, written for the particular discipline as available.

commitment to code of conductThe ECA expects all existing and new members, regardless of membership type, to act ethically and professionally in a manner consistent with the ECA’s Code of Conduct. Of particular relevance to this application are the stated expectations that members will:* act with honesty and integrity in all professional and business activities
* uphold the honesty, standing and dignity of the profession in all matters
* maintain their skills and knowledge throughout their careers
* only practise in areas in which they are competent.

The full ECA Code of Conduct is available at <http://www.eca.org.au/attachments/008_CodeOfConduct.pdf> |
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Table 1 : Requirements for ECA members seeking Specialist 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. The ECA expects that the onus is on the applicant to adequately demonstrate specialist-level competency.*

| **Service Category** | **Definition** | **Expected Qualifications/Equivalent Experience and Competencies to be demonstrated** | **Summary of Evidence provided by Applicant in Their Application****Applicant to Document below the numbered sections in the member’s Specialist Application where the evidence can be found (ECA verification)** |
| --- | --- | --- | --- |
| APPROVALS AND PLANNING |  |
| Compliance Reporting | Development and presentation of submissions that are required under the approvals to ensure compliance with statutory obligations. | * Demonstrated proficiency in compliance assessment and reporting services. It is expected that this service category may be discipline-specific.
* Training in relevant environmental compliance and investigation programs, as appropriate.
* Typical experience at a specialist level is expected to include:
* Consulting advisory role in the development, maintenance and reporting of an environmental compliance program and its related activities to conform to statutory obligations.
* Demonstrated experience in the preparation, review and delivery of compliance reports to relevant agencies on behalf of clients.
* Consulting advisory role in the development and periodic reviews and updates of compliance standards to ensure continuing currency and relevance in providing guidance to clients and/or their contractor(s).
* Demonstrated experience in providing leading industry advice on compliance risks, opportunities for improvement and solutions to meet or exceed agency expectations.
* May act in an independent review and evaluation role to ensure that compliance issues/concerns within a client/project are being appropriately evaluated, investigated and resolved.
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| APPROVALS AND PLANNING |  |
| Environmental Impact Assessment and Approvals | Involved in assessment of environmental impacts of developments or policy decisions. 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 regulatory authorities and Decision Making Authorities (DMAs). | * Demonstrated proficiency in impact assessment and approvals services.
* Training in relevant EIA practice, by a recognised tertiary institute or equivalent.
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in multidisciplinary EIA authorship, review and coordination.
* Facilitation and/or advice on EIA approvals requirements, including scoping of robust studies that align with agency expectations.
* Demonstrated experience in advocating leading industry practice in EIA approach, methods and supporting engagement to achieve environmental approvals.
* It is expected that the applicant would be responsible for at least parts of the total EIA (e.g. specific disciplines such as fauna or flora, air pollution etc), OR in a lead coordination/review role for the entire EIA.
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| Environmental Management Plans (EMP) | Preparation and/or implementation of Management Plans for activities that may have an impact on the environment | * Demonstrated proficiency in the preparation, review and implementation of EMPs to satisfy environmental management and monitoring commitments.
* It is expected that the applicant provide the details or full title of the EMP plans that are provided as evidence.
* The applicant is to have personally developed/coordinated/been responsible for the details of the EMP.
* The applicant is expected to be involved in the implementation of the EMP after its preparation, or have reviewed/implemented a previous EMP, or the EMP includes an adaptive monitoring plan and KPI’s to be achieved to enable refinement based on learnings and adaptive management philosophy.
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| APPROVALS AND PLANNING |  |
| Land Use Planning | Incorporation of environmental considerations into land development and resource use planning | * Demonstrated proficiency in land use planning services.
* 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.
* Interface with government officials, developers, and other interested parties to inform large-scale decisions regarding land use.
* Demonstrated experience in advocating leading industry practice in land use planning approach, methods and supporting engagement to achieve environmental outcomes, balanced with economic and social objectives at a regional/sub-regional/local scale.
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| Mine Closure Planning | Preparation of mine closure plans, risk assessments, consultation, monitoring and reporting requirements | * Demonstrated proficiency in mine closure planning services.
* Qualification in suitable discipline and/or post graduate service qualifications in some aspect of mine closure (e.g. rehabilitation etc).
* Typical experience at a specialist level is expected to include:
* Demonstrated involvement in all aspects of definition – including plan preparation and/or reviews, evaluation of closure risks, consultation, monitoring and reporting.
* Demonstrated experience in advocating leading industry practice in mine closure planning philosophy, methods and supporting engagement.
* Consulting advisory role in the definition of post-mining rehabilitation criteria to meet landholder and/or agency expectations.
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| APPROVALS AND PLANNING |  |
| Offsets | Development of registered offset package and strategies that are required for approved development projects | * Demonstrated proficiency in provision of advisory consulting services on environmental offsets
* Training in relevant offsets practice, as available.
* Typical experience at a specialist level is expected to include:
* Demonstrated involvement in the scoping and delivery of an offsets package required for approvals, in alignment with contemporary Government policy and guidance.
* Supporting clients in the engagement of regulatory agencies and other key stakeholders on an offsets package in support of achieving acceptable environmental outcomes.
* It is expected that the applicant can demonstrate that they have personally developed/coordinated/been responsible for the details of the actual approved offset and preferably assist in its implementation to ensure it is successful.
* Preferably able to demonstrate proficiency and experience in related services in those items involved in the offset (Rehabilitation, Fauna, Flora, Greenhouse/climate change, etc).
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| APPROVALS AND PLANNING |  |
| Project management | Lead authors, client managers and responsibility for delivering project approvals, and other environmental projects that involve multiple stakeholders and disciplines | * Demonstrated proficiency in project management and coordination as relevant to the environmental consulting profession.
* Training in relevant project management practice, by a recognised tertiary institute or equivalent project management course(s). It is noted that many companies provide in-house PM training, and this will be taken into account.
* Typical experience at a specialist level is expected to include:
* Demonstrated accountability for the planning, procurement and execution of a project.
* Demonstrated experience in the coordination of multidisciplinary inputs to deliver environmental projects.
* 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.
* Experience in interfacing with relevant stakeholders in the management of projects. Stakeholders may include: Client organisations, subcontractors, Government (Commonwealth, State, or Local), community groups or other interested parties.
* Demonstrated capability in coordinating typically more than four disciplines (e.g. Flora, Fauna, Heritage, Groundwater, Noise, Air Pollution etc) for approval type projects.
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| LAND MANAGEMENT |  |
| Environmental Audits | Auditing of an organisation’s environmental performance/compliance/systems | * Demonstrated proficiency in environmental auditing practice.
* Training in relevant environmental practice, by a recognised tertiary institute or equivalent project management course(s). Environmental auditing qualifications by a recognised ISO14001 training provider is expected at this specialist category.

The applicant is expected to show evidence as part of membership submission evaluation.* Typical experience at a specialist level is expected to include:
* Demonstrated track record in environmental auditing, including across a range of scopes:
* To review the environmental performance of a business to ensure compliance with legislation and standards and other obligations.
* To ensure that an environmental management planning framework/system (EMS) is working effectively.
* To review the environmental performance of a supplier or contractor.
* To identify opportunities for continual improvement of environmental performance.
* Audits may be targeted to a particular subject area / discipline (e.g. waste minimisation, contamination, water, greenhouse gas or energy efficiency) but experience should be demonstrated for a range of organisations/clients.
* The applicant is to have personally developed/coordinated/been responsible for the auditing function as a lead auditor across a range of consulting projects.
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| LAND MANAGEMENT |  |
| Catchment Management | Assessment and planning the management of human impacts on catchments and receiving water bodies | * Demonstrated proficiency in catchment management services.
* Training in relevant catchment management practice, by a recognised tertiary institute or equivalent (e.g. forestry, riverine environments, coastal waters, wetlands).
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in local/regional catchment management advisory services.
* Integration of contributing discipline inputs (e.g. hydrogeology, hydrology, soils and landforms, and ecological habitat values) to inform assessment and management of catchments relevant to consulting projects.
* Demonstrated leading practice in sustainable catchment management and ecosystem services planning.
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| LAND MANAGEMENT |  |
| Environmental Management Systems (EMS) | Developing and implementing environmental management systems such as those meeting the requirements of the ISO 14000 standards | * Demonstrated proficiency in the preparation, review and implementation and review of EMSs to satisfy environmental management and monitoring commitments, within a process of continuous improvement.
* Qualified EMS practitioner. Training in relevant environmental practice by a recognised tertiary institute or equivalent project management course(s). Environmental management system qualifications by a recognised ISO14001 training provider is expected at this specialist category. The applicant is expected to show evidence as part of membership submission evaluation.
* The applicant is to have personally developed/coordinated/been responsible for the details of EMSs in a consulting role, on behalf of clients.
* Typical experience at a specialist level is expected to include:
* development, implementation and review of EMSs in accordance with ISO 14000 standards.
* Policy definition, review and update.
* Identification, assessment and management of environmental aspects/risks/opportunities.
* Identification and management of legal and other environmental obligations.
* Planning for improved environmental performance.
* Developing or updating operational and system controls/procedures.
* Conducting internal system audits and reviews to identify gaps and options for continual improvement.
* It is expected that the applicant provide the details or full title of the EMSs that are used as evidence.
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| LAND MANAGEMENT |  |
| Rehabilitation | Developing and/or implementing restoration, rehabilitation or revegetation programs | * Demonstrated proficiency in rehabilitation services.
* Qualification in suitable discipline and/or post graduate service qualifications in some aspect of rehabilitation.
* Typical experience at a specialist level is expected to include:
* Demonstrated involvement in all aspects of rehabilitation – including plan preparation and/or reviews, evaluation of closure risks, consultation, monitoring and reporting.
* Demonstrated experience in advocating leading industry practice in rehabilitation planning philosophy, methods and supporting engagement.
* Consulting advisory role in the definition of post-development rehabilitation criteria to meet landholder and/or agency expectations.
* The applicant is expected to be involved in the implementation of the rehabilitation plan after its preparation, or have reviewed/implemented a previous plan, or the plan includes an adaptive monitoring plan and KPI’s to be achieved to enable refinement based on learnings and adaptive management philosophy.
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| POLLUTION |  |
| Air quality | Managing, modelling, and/or monitoring and reporting air emissions | * Demonstrated proficiency in air quality practice.
* Training in relevant air quality science, by a recognised tertiary institute or equivalent. This may include air quality, environmental chemistry or meteorology.
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in one or more aspects of air quality science, including:
* Air quality management – preparation and implementation of air quality management plans.
* Air quality inventories – development of emissions inventories using recognised guidelines and emission factors to characterise pollutant sources.
* Quantitative modelling – preparation, review and running recognised modelling platforms to inform impact assessments of development proposals, aligned with contemporary industry practice.
* Air quality monitoring – scoping, definition, design and implementation of air quality monitoring programs across a development lifecycle (baseline, construction, commissioning, operations) as relevant.
* Air quality reporting – compilation, data management and interpretation and trend analysis of air quality data to inform compliance reporting and/or management programs.
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| POLLUTION |  |
| Contaminated sites | Investigating, quantifying, monitoring and/or remediating of contaminated sites | * Demonstrated proficiency in contaminated sites management practice.
* 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 at a specialist level is expected to include:
* Demonstrated track record in developing preliminary and detailed environmental site investigations.
* Preparation and/or implementation of remediation action plans, validation reports and/or hazardous building material assessments.
* Demonstrated experience in applying WA Contaminated sites/NEPM Guidelines.

OR* Qualified Contaminated Sites Auditor
* Evidence of multiple contaminated sites audits submitted to and accepted by DER Contaminated Sites Branch.
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| POLLUTION |  |
| Noise | Managing, modelling, monitoring and reporting noise emissions in either marine or terrestrial environments | * Demonstrated proficiency in noise/acoustic management practice.
* Training in relevant engineering or science discipline, by a recognised tertiary institute or equivalent.
* It is understood that practitioners may be specialists in different aspects of acoustic science, e.g. modeler competencies are distinctly different to monitoring competencies. Similarly, competencies in underwater noise assessment and management are distinctly different to terrestrial noise, and this is to be taken into account.
* Broad representative background may include experience as a Noise Officer or a Marine Observer qualified in Passive Acoustic Monitoring (PAM).
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in one or more aspects of noise/acoustic science, including:
* Noise and/or vibration management – preparation and implementation of noise/vibration management plans.
* Noise source inventories.
* Quantitative modelling – preparation, review and running recognised modelling platforms to inform impact assessments of development proposals.
* Noise quality monitoring – scoping, definition and implementation of noise monitoring programs across a development lifecycle (baseline, commissioning, operations) as relevant.
* Noise quality reporting – compilation, interpretation and trend analysis of noise quality data to inform compliance reporting and/or management programs.
* Noise management planning during construction and construction planning.
* Determination of noise and/or vibration mitigation strategies and design advice.
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| POLLUTION |  |
| Radiation | Radiological monitoring. Developing materials management processes. | * Demonstrated proficiency in radiation management practice.
* Training by a recognised tertiary institute or equivalent.
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in scoping, preparation and delivery of radiation studies as relevant to the consulting profession.
* Radiation protection practitioners engaged to measure and monitor levels of radiation and provide expert advice on complying with statutory and regulatory requirements relating to radiation safety.
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| Waste - Liquid Management | Management, monitoring and planning of industrial and domestic liquid waste and/or supplying WWTP/Tailing ponds | * Demonstrated proficiency in waste management practice for liquid waste streams.
* Training by a recognised tertiary institute or equivalent. This may include civil or process engineering, environmental engineering or environmental chemistry.
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in consultancy services to industrial/domestic/Government water utility clients.
* Definition and characterisation of liquid waste streams relevant to a development proposal / operational facility.
* Provision of leading industry advice in practical solutions to manage and monitor liquid effluent discharges to meet operational requirements, compliance limits or improved environmental performance.
* Demonstrated experience in advocating leading industry practice in liquid waste minimisation, recycling and innovation.
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| POLLUTION |  |
| Waste - Solid Management | Monitoring, planning, designing and/or management of industrial and domestic solid waste. | * Demonstrated proficiency in waste management practice for solid waste streams.
* Training by a recognised tertiary institute or equivalent. This may include civil or process engineering, environmental engineering or environmental chemistry.
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in consultancy services to industrial/domestic/Government water utility clients.
* Definition and characterisation of solid waste streams relevant to a development proposal/operational facility.
* Provision of leading industry advice in practical solutions to manage and monitor solid non-hazardous/hazardous waste streams to meet operational requirements, compliance limits or improved environmental performance.
* Demonstrated experience in advocating leading industry practice in solid waste minimisation, recycling and innovation.
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| ECOLOGICAL SERVICES |  |
| Aquatic/Wetlands | Providing ecological advice on terrestrial water ways, lakes and wetlands. Conducting surveys to define wetland values and monitoring aquatic wetland systems. Assessment and management advice for terrestrial/surface Groundwater Dependent Ecosystems | * Demonstrated proficiency in aquatic/wetland ecological services.
* Training in relevant catchment management practice, by a recognised tertiary institute or equivalent (e.g. Qualification in Zoology or Botany or Environmental Science or other qualifications with a major in aquatic wetlands or suitable post graduate qualifications in aquatic wetlands).
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in local/regional wetland management advisory services.
* Integration of contributing discipline inputs (e.g. hydrogeology, hydrology, soils and landforms, and ecological habitat values including GDEs) to inform assessment and management of aquatic/wetland ecosystems relevant to consulting projects.
* Demonstrated leading practice in sustainable wetland management and ecosystem services planning.
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| Climate Change | Identification of climate change risks to the built and natural environment and developing tailored adaptation options to respond to these risks | * Demonstrated proficiency in climate change management and resilience 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 adaptation planning relevant to consulting projects.
* Climate change risk assessment and adaptation planning using the latest industry standards (e.g. Australian Standard AS5334 - Climate change adaptation for settlements and infrastructure).
* Identification and benchmarking of best practice adaptation measures to achieve environmental, social and economic outcomes.
* Demonstrated experience in climate change adaptation planning in a local/regional/global development context.
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| ECOLOGICAL SERVICES |  |
| 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.
* Preferably work undertaken in a declared conservation area or next to a conservation 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, restoration, revegetation, fire management.
* 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.
* Demonstrated leading practice in sustainable conservation management and ecosystem services planning, including NRM capacity-building.
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| ECOLOGICAL SERVICES |  |
| Marine Ecology (Fauna and Flora) | Providing advice on: * Design and implementation of marine fauna and flora studies
* assessment of potential risks to, and impacts upon, endangered/threatened marine species and other ecological values,
* management and monitoring of anthropogenic effects on marine ecology
 | * Demonstrated proficiency in marine ecology practice.
* Training in relevant marine ecology science, by a recognised tertiary institute or equivalent. This may include marine biology, conservation biology, zoology or environmental science.
* It is understood that practitioners may be specialists in different aspects of marine ecology science, e.g. marine infauna or megafauna competencies are distinctly different to seagrass/coral habitat analysis 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 marine ecology science, including (but not limited to):
* Scoping, execution and reporting of marine ecology studies (e.g. plankton, benthic infauna, intertidal, shallow or deepwater communities, marine invertebrates, megafauna).
* Assessment of potential risks and impacts from development activities on marine fauna and flora, including conservation significant species. This could include benthic habitat mapping and analysis, introduced marine pests.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key marine ecological values.
* Marine ecology management and monitoring – preparation and implementation of marine ecology management and monitoring plans.
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| ECOLOGICAL SERVICES |  |
| 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.
* 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.
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| 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.
* 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.
* Advisory services on current and emerging sustainability policy settings at a local, National and international framework.
* Sustainability benchmarking and reporting consistent with contemporary industry practice
* Strategic business case development and engagement with business, community and Government stakeholders.
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| ECOLOGICAL SERVICES |  |
| 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.
* Demonstrated experience in all aspects of flora, including field survey methods to plant identification and conservation significance assessments.
* Demonstrated experience in all aspects of vegetation, from field survey methods and vegetation mapping to data analysis and conservation significance assessments.
* 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.
* Assessment of potential risks and impacts from development activities on terrestrial flora/vegetation, including conservation significant or range-restricted species and communities.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key terrestrial ecological values.
* Terrestrial ecology management – preparation and implementation of terrestrial ecology management plans.
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| ECOLOGICAL SERVICES |  |
| Terrestrial Invertebrate Fauna | Providing ecological advice on Australian terrestrial invertebrate native fauna. Conducting terrestrial invertebrate fauna surveys | * Demonstrated proficiency in terrestrial invertebrate fauna ecological services.
* Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. Qualification in Entomology, Zoology or Environmental Science or other qualifications with a major in invertebrate fauna).
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in terrestrial invertebrate fauna management advisory services, including scoping/preparation and execution of surveys consistent with contemporary industry practice and guidelines.
* Integration of contributing discipline inputs (e.g. flora and vegetation studies and ecological habitat values including SREs) to inform assessment and management of terrestrial fauna ecosystems relevant to consulting projects.
* Assessment of potential risks and impacts from development activities on terrestrial invertebrate fauna, including conservation significant or range-restricted species.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key terrestrial ecological values.
* Terrestrial ecology management – preparation and implementation of terrestrial ecology management plans.
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| ECOLOGICAL SERVICES |  |
| Terrestrial Vertebrate Fauna | Providing ecological advice on Australian terrestrial vertebrate native fauna. Conducting terrestrial vertebrate fauna surveys | * Demonstrated proficiency in terrestrial vertebrate fauna ecological services.
* Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. Qualification in Zoology or Environmental Science or other qualifications with a major in vertebrate fauna).
* Typical experience at a specialist level is expected to include:
* Demonstrated track record in terrestrial vertebrate fauna management advisory services, including scoping / preparation and execution of surveys consistent with contemporary industry practice and guidelines.
* 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.
* Assessment of potential risks and impacts from development activities on terrestrial vertebrate fauna, including conservation significant or range-restricted species.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key terrestrial ecological values.
* Terrestrial ecology management – preparation and implementation of terrestrial ecology management plans.
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| 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.
* 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.
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| PHYSICAL SERVICES |  |
| 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).
* Interpretation of technical data and information from maps and historical documents to build a conceptual model of groundwater flow and quality.
* Using modelling techniques to enable predictions to be made about future trends and impacts on groundwater flow and quality.
* Assessment of potential risks and impacts from development activities on groundwater resources and uses, to provide reliable characterisation to inform decision-making.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key hydrogeological values.
* Groundwater management – preparation and implementation of groundwater management and monitoring plans.
* It is expected that groundwater modelling specialists are proficient in computer systems and data management/GIS.
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| PHYSICAL SERVICES |  |
| Hydrology | Hydrological modelling and analysis of surface water monitoring, and/or flood mitigation and/or providing advice 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, environmental 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).
* 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.
* Using modelling techniques to enable predictions to be made about future trends and impacts on surface water flow and quality, including flooding studies.
* Assessment of potential risks and impacts from development activities on surface water resources and uses, to provide reliable characterisation to inform decision-making.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key hydrological values.
* Surface water management – preparation and implementation of surface water management and monitoring plans.
* It is expected that surface water modelling specialists are proficient in computer systems and data management/GIS.
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| PHYSICAL SERVICES |  |
| Marine and Coastal | Providing advice on:* Coastal, estuarine and / or marine physical and chemical baseline data collection
* Potential risks to, and impacts upon, marine and coastal environments from anthropogenic effects (e.g. water pollution, dredging, coastal erosion etc)
* Management and monitoring of anthropogenic effects on marine and coastal environments
 | * 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 or 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 marine physico-chemical studies (e.g. water quality, sediment quality, sedimentation and deposition, current profiling).
* Assessment of potential risks and impacts from development activities on marine and coastal physico-chemical attributes or processes. This could include quantitative methods for assessing physico-chemical processes or changes at a local or regional scale.
* Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key marine and coastal values.
* Marine and coastal management and monitoring – preparation and implementation of marine management and monitoring plans.
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| 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, geography, cartography).
* Typical experience at a specialist level is expected to include:
* Demonstrated involvement in the compilation and management of environmental data sets.
* Supporting clients in the qualitative, statistical analysis or modelling of environmental data sets.
* 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.
* 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).
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| SUPPORT SERVICES |  |
| 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, geography, cartography).
* 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.
* Supporting clients in the assessment of data to inform decision making.
* It is expected that specialists are proficient in computer systems and data management/GIS and data portals to facilitate remote sensing/GIS solutions.
* 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).
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| SUPPORT SERVICES |  |
| 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.
* Stakeholder mapping and analysis, to inform sound decision-making on engagement approach and prioritisation.
* Supporting clients in the facilitation of engagement activities, including preparation and follow-up, across Government, industry and community stakeholder groups.
* 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.
* Development, implementation and review of stakeholder engagement programs consistent with contemporary industry practice and guidance.
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