### 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.

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Definition</th>
<th>Expected Qualifications / Equivalent Experience and Competencies to be Demonstrated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAINING AND DEVELOPMENT</strong></td>
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</table>
| 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/ordinated/een 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.                                                                                                                                                                                                                                                                  |
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</table>
| 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 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, 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. |
<table>
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<tr>
<th>Physical Services</th>
<th>Providing advice on:</th>
<th>Demonstrated proficiency in land capability and soil services.</th>
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</thead>
</table>
| Land capability, Soils | • 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. | • 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. |
<table>
<thead>
<tr>
<th>Hydrology</th>
<th>Hydrological modelling and analysis of surface water monitoring, and/or flood mitigation and/or providing on management of surface water resources</th>
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<tbody>
<tr>
<td></td>
<td>• Demonstrated proficiency in hydrology practice.</td>
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<tr>
<td></td>
<td>• Training in relevant hydrological science, by a recognised tertiary institute or equivalent. This may include hydrology, civil engineering or spatial sciences.</td>
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<td></td>
<td>• 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.</td>
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<td>• Typical experience at a specialist level is expected to include:</td>
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<td>• Demonstrated track record in one or more aspects of hydrology science, including:</td>
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<td></td>
<td>• Scoping, execution and reporting of baseline studies (e.g. surface flow measurement / sampling and analysis); and/or</td>
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<td></td>
<td>• 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</td>
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<td></td>
<td>• 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</td>
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<td>• 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</td>
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<td></td>
<td>• Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key hydrological values; and/or</td>
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<td></td>
<td>• Surface water management – preparation and implementation of surface water management and monitoring plans to achieve environmental outcomes; and/or</td>
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<td></td>
<td>• It is expected that surface water modelling specialists are proficient in computer systems and data management / GIS.</td>
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<tr>
<th>Marine and Coastal</th>
<th>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</th>
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<tr>
<td></td>
<td>• Demonstrated proficiency in physical marine and coastal practice.</td>
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<td></td>
<td>• Training in relevant marine science, by a recognised tertiary institute or equivalent. This may include oceanography, marine science, coastal geomorphology).</td>
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<td></td>
<td>• It is understood that practitioners may be specialists in different aspects of marine and coastal science. This will be taken into account.</td>
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<td></td>
<td>• Typical experience at a specialist level is expected to include:</td>
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<td></td>
<td>• Demonstrated track record in one or more aspects of marine and coastal science, including:</td>
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<tr>
<td></td>
<td>• Scoping, execution and reporting of physical / physico-chemical marine studies (e.g. water quality, sediment quality, sedimentation and deposition, underwater current profiling); and/or</td>
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<td>• 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</td>
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<td></td>
<td>• Demonstrated application of leading industry methods for managing significant direct or indirect impacts on key marine and coastal values.</td>
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<tr>
<td></td>
<td>• Marine and coastal management – preparation and implementation of marine management plans to achieve environmental outcomes.</td>
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<td>SUPPORT SERVICES</td>
<td>Data Management and Analysis</td>
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<tr>
<td>Compiling and managing large environmental datasets. Services may include development of relational databases. Providing qualitative, statistical analysis or modelling of environmental data.</td>
<td>Demonstrated proficiency in provision of advisory consulting services for data management and analysis.</td>
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<tr>
<td>Training in relevant practice, by a recognised tertiary institute or equivalent (e.g. computer science, spatial / GIS, mathematics).</td>
<td>Typical experience at a specialist level is expected to include:</td>
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<tr>
<td>Typical experience at a specialist level is expected to include:</td>
<td>• Demonstrated involvement in the compilation and management of environmental data sets; and</td>
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<tr>
<td>• Supporting clients in the qualitative, statistical analysis or modelling of environmental data sets; and</td>
<td>• Supporting clients in the assessment of data to inform decision making; and</td>
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<tr>
<td>• 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</td>
<td>• It is expected that specialists are proficient in computer systems and data management / GIS and data portals to facilitate remote sensing / GIS solutions; and</td>
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<td>• 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).</td>
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